Mobile Life Report 2008: The Connected World

Exploring our relationships with modern technology in a wireless world

Contents

Mobile Life is the voice of authority and an on-going forum that publishes the most comprehensive proprietary research into the impact of technology on our daily lives.

Foreword

Charles Dunstone
Chief Executive Officer
The Carphone Warehouse Group plc

As we shape our business in the 'connected world' and bring a wider range of connected products to our customers; understanding how they feel about, live with and are empowered by technology is fundamental to determining our footpath.

We established Mobile Life in 2006 to better understand the impact of mobile phones on our customers' daily lives. How have mobile phones affected us, do they help us become better communicators, how do they impact our family, our identity, our relationships? This year we have developed the research to delve into the wider technological lives of our customers.

We asked them to stop surfing, texting and gaming for a moment to think about how their lives have altered in recent years at home, at work and at play. Connected technologies have enhanced so many aspects of our lives and created numerous benefits that we have all started taking them for granted.

As many of us spend more and more time on-line, we believe some big questions are emerging:

Are we losing the ability to form 'real life' relationships?

Are parents able to keep up with what their kids are doing on the computer when they say they are doing their homework?

Do families spend their free time together, or have individual games consoles, Googling and emailing taken over?

Above all, do people communicate with each other more or less than they used to?

The report seeks to answer these questions and I hope you will find the responses interesting. We discovered, for example, that many young people prefer chatting to friends online than face-to-face.

When asked if they could only keep one of their electronic devices, while adults said they would keep their TV, youngsters considered their mobile phone and computer to be their best friend. Perhaps we're entering an age of post-TV entertainment?

Mobile Life provides our business with invaluable insights which enable us to understand our customers more fully and so respond better to their needs across the business; deliver better product solutions, improved advice and superior customer care. We are committed to placing this understanding at the heart of everything we do; from the best buying in our purchasing teams to how we talk to our customers through marketing or the retail experience we bring them in store.

Mobile Life: The Connected World is the fifth in the Mobile Life series. As we have joined forces with Best Buy, the world's largest consumer electronics company, to create a new venture it made sense to extend our research across the pond. In this report, we questioned 6,000 people in the USA and the UK.

It would not have been possible for us to extend this research without the advice and strategic counsel of our academic partner The London School of Economics and Political Science who helped to design the survey. Along with our other contributors, Tanya Byron, Clinical Psychologist and BJ Fogg, Founder and Director of Stanford University persuasive technology lab, who have each developed some fascinating theories about how we live our lives in 2008. I hope you find this report as insightful as we do.

1. Technology Behaviour

Tech fix

If we needed more evidence that technology plays a crucial role in the lives of our two nations then we have it: TVs, computers and mobiles are almost universally owned in both the UK and US. For the younger generation, we can add games consoles and MP3 players to that list - in both cases three in every four young people in both the US and UK own or have access to them.

One striking theme to emerge from the survey is that the British own more gadgets and as the graph below shows, this is true of almost every category. The most stark difference is that 94% of British youngsters own mobile phones compared to 80% in the US.

Which of the following do you personally own or have access to?

Legend: US Kids | UK Kids | US Adults | UK Adults
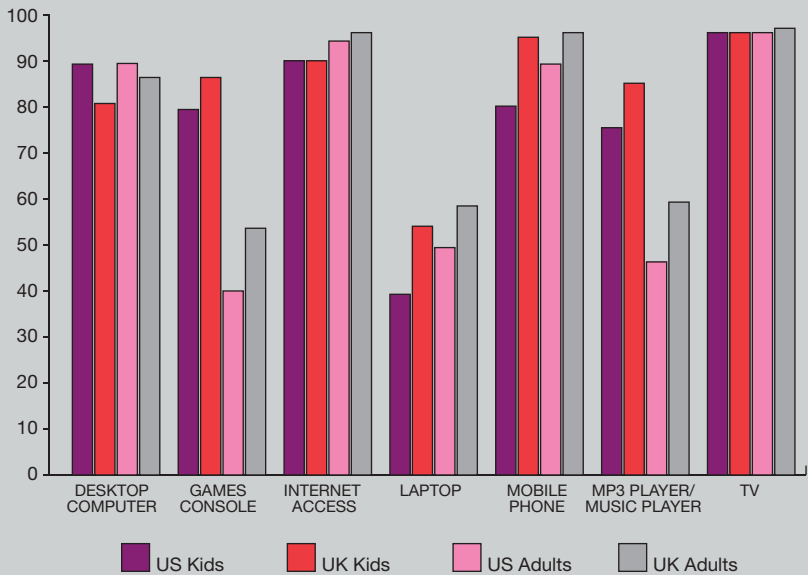
Here's a tough question: What if we could only keep one of our devices?

Interestingly while adults said they would stick with their TV, youngsters on both sides of the pond consider their mobile phone to be their best friend. It is fascinating to see how far down the 'must-have' list the TV has dropped for most kids. As well as their mobile phone, our young US respondents are more likely to want to keep their computer than their TV. In the UK too, the TV is losing its significance with mobile phones, computers and games consoles all rated as more important.

The post-TV entertainment age seems to have well and truly arrived.

If you had to give up all of these things except ONE of them, which would you choose to KEEP?

Legend: US Kids | UK Kids | US Adults | UK Adults
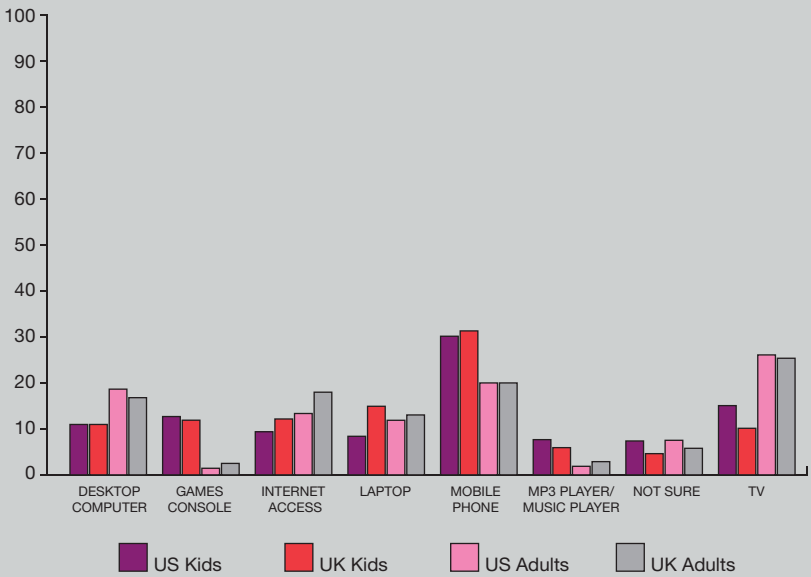
If you ever had to punish your child(ren), which of the following are you most likely to do?

Legend: US Adults | UK Adults
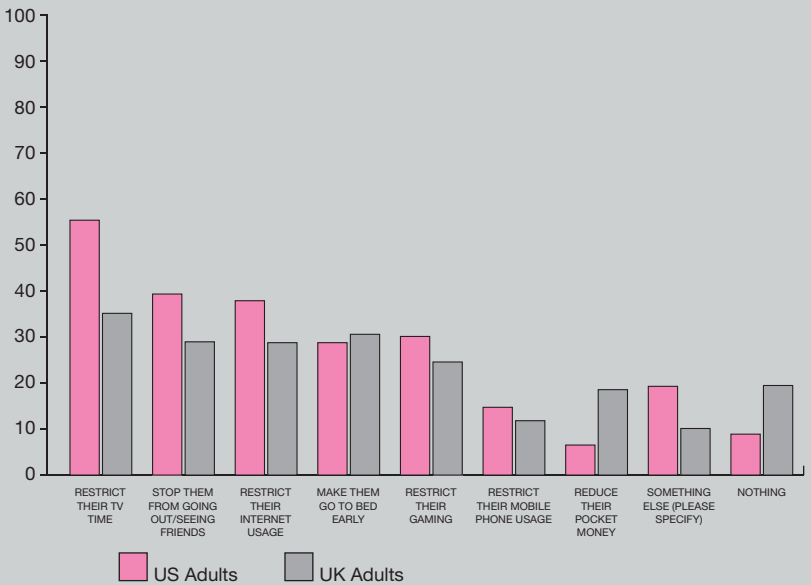
We also asked parents how they were most likely to punish their kids if they misbehaved and, as the graph above shows, two of the most popular methods were to restrict TV or internet use. Given our findings perhaps confiscating their mobile phone for a few days might be more effective!

17% of UK adults told us they owned two or more mobile phones compared to 11% in the US.

The rise of the laptop

Currently, an average of 60% of adults both in the UK and in the US own one or more laptop computer and 88% have at least one desktop, meaning a fair few have both. Perhaps the laptop will eventually take over, one quarter of desktop owners say they will swap their current desktop for a laptop when the time comes to replace it.

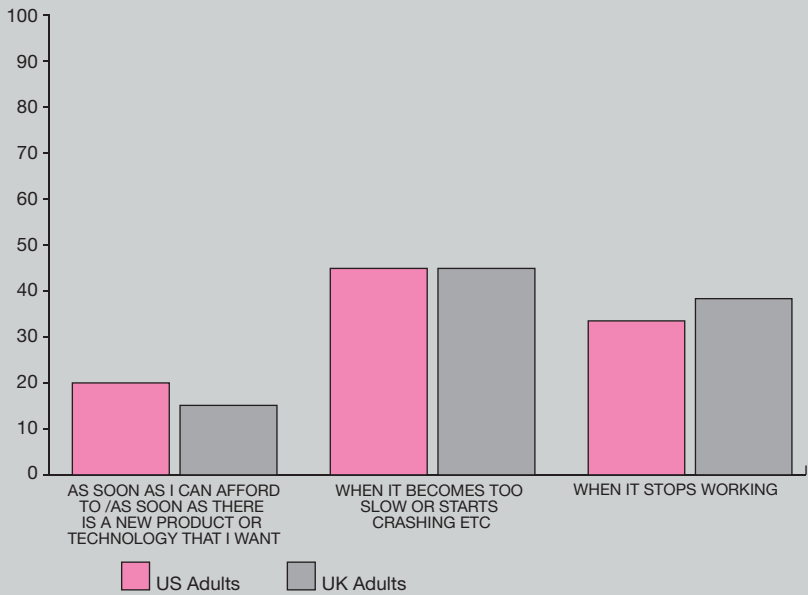While the majority replace equipment when it becomes too slow or stops working altogether, 17% say they replace their IT equipment with the latest models as soon as they can afford to.

When would you normally upgrade your computer?

AS SOON AS I CAN AFFORD TO /AS SOON AS THERE IS A NEW PRODUCT OR TECHNOLOGY THAT I WANT   WHEN IT BECOMES TOO SLOW OR STARTS CRASHING ETC   WHEN IT STOPS WORKING

US Adults   UK Adults

Mobile chat

When we look at how we use mobile phones, some interesting differences between the two nations emerge. While just 4% of British adults have resisted getting a mobile phone, in the US some 10% of adults are still mobile phone free. In fact, 17% of UK adults told us they owned two or more mobile phones compared to 11% in the US.

How many calls do you make on an average day on your mobile/cell phone?

0   1-5   6-10   11-15   16+

US Kids   UK Kids   US Adults   UK Adults
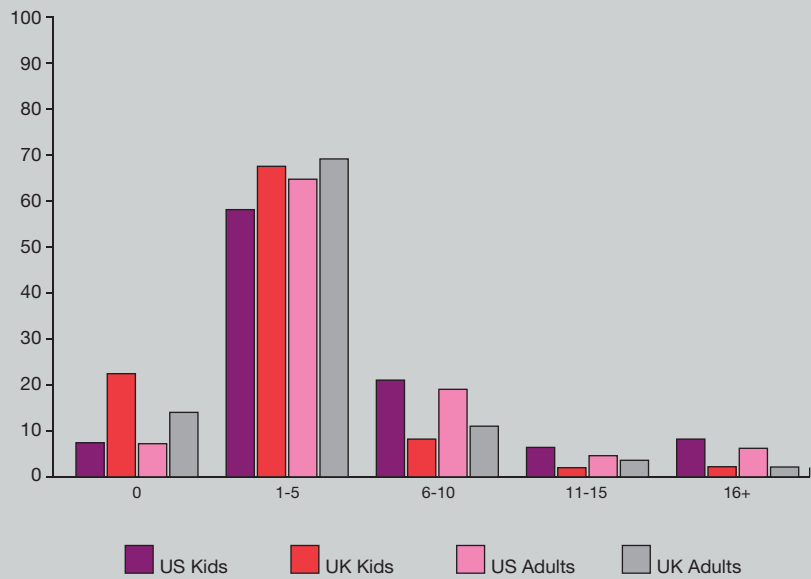
Similarly the two countries use their mobile phones differently, broadly, Americans make more calls while the British send more texts.

More than a third of US youngsters and adults make six or more calls on an average day when only 12% of UK kids and 16% of UK adults make this many calls. In fact, 22% of UK youngsters make no calls on an average day, compared to just 7% in the US.

How many texts do you send on an average day on your mobile/cell phone?

0   1-5   6-10   11-15   16+

US Kids   UK Kids   US Adults   UK Adults
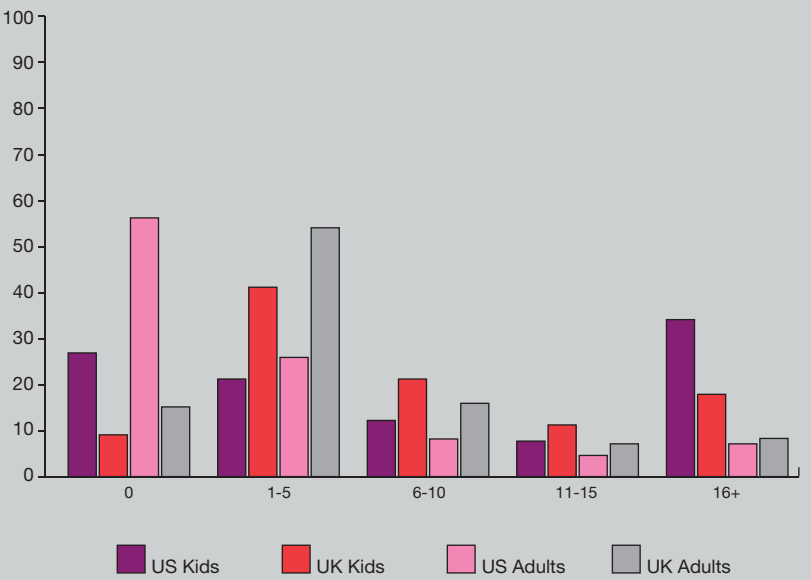
By contrast the majority of US adults do not send any texts on an average day while over half their UK counterparts send between one and five texts per day while a further 31% send more than six.

British youth are really prolific texters with 50% sending more than six every day. The most interesting point about this graph is the pattern for US kids - while they are much more likely than youngsters in the UK to send no texts on an average day (27% versus 9% in the UK) - they also make up the biggest group of heavy texters: 33% of US kids send 16+ texts a day. This points to the potential emergence of an interesting trend in the US: while SMS use has not really taken off amongst adults, perhaps the next generation are going to embrace texting with even more passion than young people in Britain.

Mobiles are the communication device of choice for youngsters in both countries with more than half reporting that mobile calls and texts are their most important means of keeping in touch. Adults in the US largely favour email as the preferred communication with friends but in the UK there is an even split between texts and email:

Which is the most important form of communication that you use to stay in touch with friends?

	UK Kids	US Kids
Email	12%	15%
Calls via a mobile	9%	20%
Calls via a landline	10%	22%
Texts	52%	32%
IM	17%	11%
Letters:	0%	0%

	US Adults	UK Adults
Email	6%	26%
Calls via a mobile	18%	23%
Calls via a landline	25%	17%
Texts	46%	28%
IM	4%	4%
Letters:	1%	2%

Staying in touch with those who matter the most

Dr Carsten Sørensen, Senior Lecturer (Associate Professor)
London School of Economics and Political Science

Living together has traditionally shaped the feeling of belonging. With internet and mobile technologies, it is now easier than ever before to be together, whilst apart.

Email communication forms the backbone of American family life and friendships - 85% use it regularly to contact friends and 74% for contacting family members. In the UK, 79% use email as one of the means of staying in touch with friends and 58% for family contacts. The ease of electronic communications perhaps also implies a loss of value.

Emails and SMS messages are rapidly sent, so perhaps it is significant that 15-20% of both Brits and Americans regularly stay in touch with friends and family through handwritten letters. Americans are slightly more likely to send letters to their family members than the British, but interestingly, there is no significant difference between the age groups. Whilst struggling to hold its own against new more instant forms of communication, the old-fashioned letter still holds some value with around one-fifth of the population across all ages of adults, so maybe it could even get a revival as a way of communication, which signals that the sender has made a special effort?

Whilst landline phone calls are used by 73% of the British for staying in touch with family members, less than 58% of Americans choose this when contacting their families. Similarly, 60% of British people and only 50% of Americans use landline calls to friends.

In contrast, no significant differences were found in the use of mobile phones for staying in touch with friends and family. In both countries, around 63-66% of the population use mobile phones when communicating with friends as well as family members. Despite the traditional wisdom of the American mobile phone market being less mature than the European and South-East Asian one, the results here clearly demonstrate that this is not the case when people are maintaining their social relations with friends and family. This really illustrates the main reasons why people purchase and use mobile phones - to keep in touch with people who really matter to them.

Americans use fewer mediums of communication when engaging with both friends and family than the British. Interestingly, the variation in the use of communication means to contact friends and family did not depend on to what extent people are light or heavy internet users at home or at work, their age group, or the intensity of their mobile phone use. This indicates that technology is now an ordinary and domesticated part of everyday life and the differences across the two countries reflect broader differences in the use of communication technology. Indeed, over 40% of the population in both countries felt that they would feel cut off from the world without internet access.

Overall online activity from mobile phones remains limited. However, there are some signs of its increasing popularity.

Accessing the internet via mobile phones

When we look at what people do online via their mobile phone, we find the generational divide is greater than the geographical one with British youngsters leading the way. Amongst adults the only common online activity done via mobile phones is emailing (24% of US adults and 17% of UK adults have done this) followed by obtaining news or weather reports online via their mobile phone (14% in both countries). One in 10 have also downloaded music or photos to their mobile phones.

With young people, the figures are much higher, especially for British teenagers. One in three British youngsters say they have accessed online gaming via their mobile and one in four have downloaded music or photos. Around one in six have sent emails or watched online videos via mobile phones. As the chart below shows, US kids are doing the same activities but in slightly lower numbers.

So while overall online activity from mobile phones remains limited, there are some signs of its increasing popularity on both sides of the Atlantic, in particular amongst the youth market.

Which of the following activities have you ever done online from your mobile/cell phone?
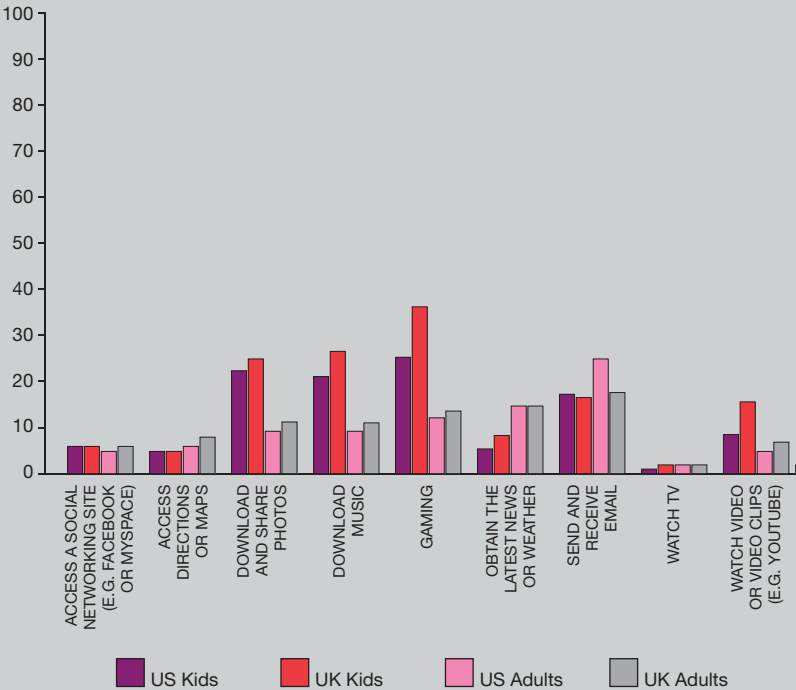
Legend: US Kids, UK Kids, US Adults, UK Adults

British adults are more technically demanding than their US counterparts. The majority of US adults plumped for 'keeping it simple' and only 18% felt they needed the high tech functions.

Mobile must-haves

When considering what kind of mobile phone we want, adults and youngsters have very different demands. We asked people whether their ideal mobile phone:

1. MUST HAVE as many high-quality functions as possible such as a camera, a portable radio and an Mp3 player

2. WOULD BE GOOD IF IT HAD: High-quality functions such as a camera, a portable radio and an Mp3 player

3. Or if they would prefer it to be as SIMPLE AS POSSIBLE, and only include functions for talking, texting and pictures

Youngsters in both countries wanted as many high-quality functions as possible (62% of UK kids and 46% in the US) while adults were more likely to opt for keeping it simple.

But, as we would expect from the more mature market, British adults are more technically demanding than their US counterparts. The majority of US adults plumped for keeping it simple and only 18% felt they needed the high tech functions. For British adults there was indeed a preference for the simple option (38%), but 34% of British adults saw the functions as good to have while just over one quarter regarded high-tech functions as necessary.

It will be interesting to see how long it takes the next generation of mobile users in the US to catch up with this level of sophistication - we could speculate perhaps that the large group of heavy text users amongst younger people in the US represents a new generation of mobile phone users who will catch up with and perhaps even overtake the British demand for high-quality functions in the not too distant future.

by BJ Fogg
Ph.D. Founder and Director of Stanford University
Persuasive Technology lab

New Horizons in Mobile Life and Our Social World

Last week a famous musician sent me an email. He wanted my advice on building his fan club online. "Call me," he wrote. And then the musician ended the email with a surprise: his mobile phone number.

"Wow!" I thought.

I've been a longtime fan of this musician's work. I own seven of his CDs. I go to his concerts in California. And when I host parties at my home, I play his songs. For years, I've enjoyed his music. Today, I have his mobile phone number.

I must confess that when I read the word "mobile" next to the 10-digit phone number in his email, something changed inside me. I was no longer merely a fan of this talented musician. Suddenly, I was his trusted friend.

Through his mobile phone I could reach him any time, any place. If I wanted to be a nuisance, I could phone this celebrity at midnight with a philosophical question. I could text message him hourly updates about my vacation in Hawaii. Or I could record on his voicemail songs I've written for the ukulele. With his mobile phone number, all of this became possible. (But of course, I did none of these things. Instead, I called him, and we talked business.)

Sharing your mobile phone number is an act of trust. It's like giving someone a key to your front door.

The mobile phone is the most intimate of technologies. We keep this device near us at all times. We use it to connect with people we love most, on topics that matter most. If we ever happen to leave home without our mobile phones, we feel lost, not quite whole, far from complete. Without the mobile phone, we feel cut off from our friends and from our communities. We are missing part of ourselves.

The mobile phone has become a human appendage. This, I believe, is not an exaggeration. Around the world we've changed the course of human evolution by adopting mobile phones quickly, passionately, and universally. For the rest of our lives, virtually everyone we know will carry a mobile phone, and we'll use it throughout the day – and night. We'll never turn back. Our connection to mobile phones will only get stronger as the handsets and mobile services improve.

When asked to keep only one technology in their lives, adults most often select TV as the keeper. Mobile phones were a close second choice. But the choice is different for kids under 18. They selected mobile phones as the #1 item.
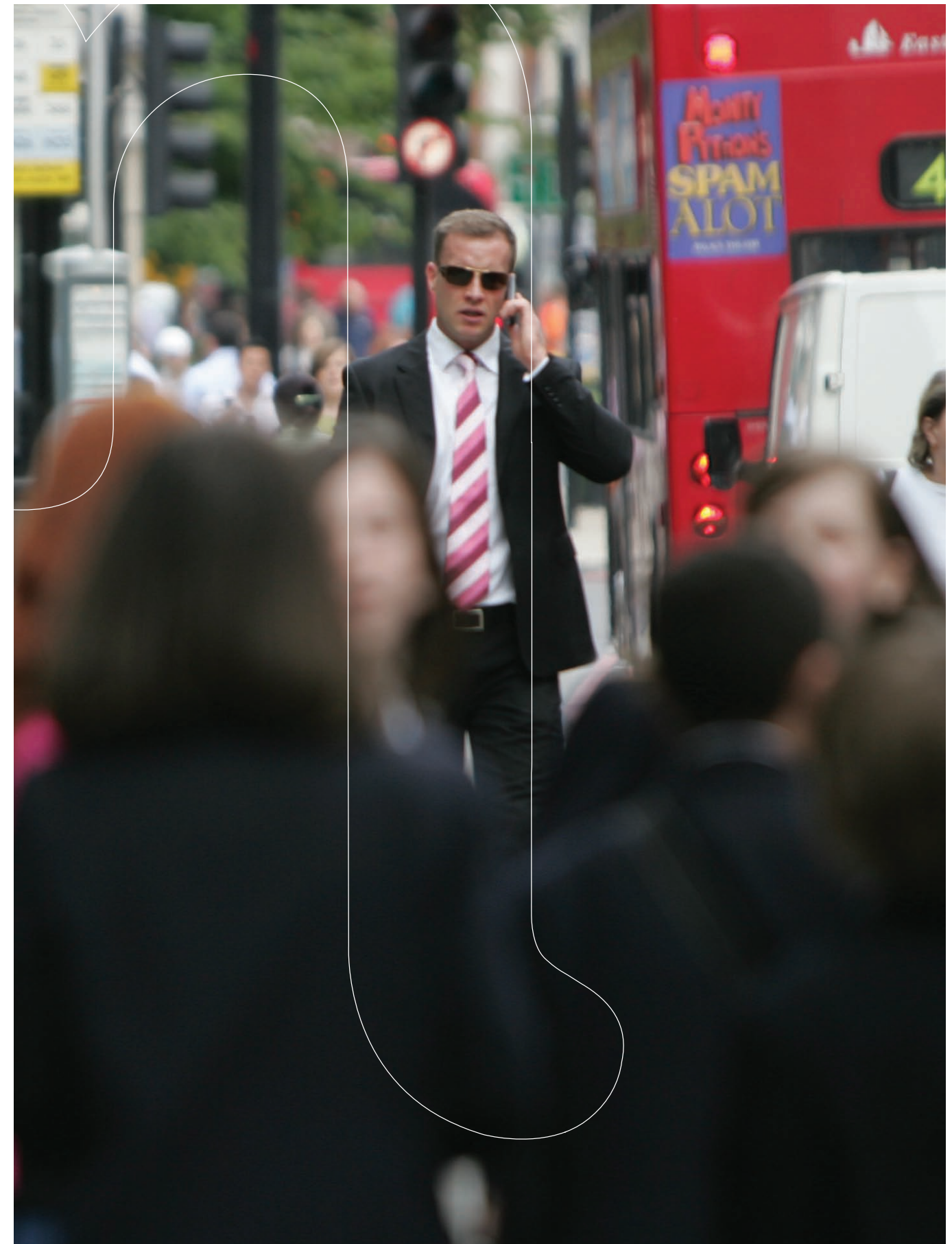
Sharing your mobile phone number is an act of trust. It's like giving someone a key to your front door.

For them, the mobile phone ranks ahead of TV, laptops, or video games. For most, this is no contest. And the kids are correct. In the future, all of us – adults and kids alike – will choose mobile phones above all other technologies. It will be the one device we cannot live without.

Some adults haven't yet realized the premiere place of mobile in their lives. To get a glimpse, consider this question: Do you remember the first TV you owned? Probably not. In contrast, do you remember your first mobile phone? If you're like most adults, you can recall your first mobile phone, and perhaps even the specific make and model. Many can remember how and when the phone came into their lives. Most important, you might recall the feeling of freedom and power the phone gave you. From a psychological perspective, adopting and using mobile phones has expanded our lives. TV has only made us more passive. The difference is huge.

Mobile expands our reach, our power, and our awareness. Perhaps the most valuable benefit is how mobile strengthens our relationships, how it makes us active participants in others' lives. I believe that this is the key to happiness: having close relationships. And mobile phones make this easier to do in our busy world.

I once again experienced marvels of mobile connectivity during a recent trip to Europe. One morning, using my mobile phone, I called my niece in Las Vegas. I wanted her to know I was flying in to attend her high school graduation ceremony.

As we talked, I could tell she was happy to hear the news. And for the next few minutes, we talked about her boyfriend and her college plans. It was expensive chit-chat, I'm sure, but entirely worth it. I put my phone in my pocket, once again amazed how this tiny device can span the Atlantic ocean and the American continent to bring me closer to people I love.

Later that week, my plane touched down at the Las Vegas airport just before my niece's graduation ceremony began. I went directly to the stadium. I found thousands of noisy people filling the seats, cheering and yelling. I realized I would not be able to see my niece before the event began. She was backstage. And once she emerged into the stadium, she would never pick me out in a raucous crowd. My heart sank. I had made such an effort to be there – flying in from Europe to be physically present – and my niece wouldn't know I was there until the event had ended. So once again, I turned to my mobile phone. I texted her this message: "I'm here!" In a few seconds, she replied with a texted smiley face.

Those simple, quiet characters we exchanged in that noisy stadium spoke volumes about our relationship. And that's how it often goes with texting – we confirm our ties to others. Sometimes we don't exchange any new information; we text small talk to convey that the other person matters to us. In this way, texting is more personal, more convenient, and more effective than email.

The mobile phone has become a human appendage.

Texting can go beyond personal connections. During the last year, I have championed the use of texting to the health-care industry in the U.S. Along the way, I recruited the U.S. Centers for Disease Control and other influential stakeholders. Together we organized a conference called "Texting 4 Health," held at Stanford University. We hoped to highlight how this simple yet powerful channel can promote healthier lives by helping people quit smoking, exercise more, and do other health-related behaviors.

As people began to register for the event, our suspicions were confirmed: More than half the people signing up had never sent a text message. Never. But this was no surprise. Unlike adults in the UK and Europe, adults in the U.S. rarely use text messaging. We suspected that. So we planned our event to address this reality. The evening before the event began, we offered an optional workshop called "Texting 101," an introduction to texting. People flew in early to attend.

Running this event was easy. I asked my students to work individually with the health professionals and teach them texting. The students, of course, needed no preparation. The adults, of course, were nervous. In fact, the professionals were often embarrassed to admit they could not text – embarrassed because these folks were often considered to be the most "tech savvy" people in their health care organizations. Technology was their job. But too often their expertise was all about computers and the internet, not mobile. So that evening at Stanford University these old dogs learned new tricks.

And our "Texting 101" workshop was a big hit.

I was especially pleased to hear reports from the professionals who, during the workshop, sent their first-ever text message to their kids. The response back made the professionals feel great: "Mom, I can't believe UR txting me!" and "Welcome to the 21st century, Dad."

Of course, kids aren't always right when it comes to technology. Often they embrace technology to the extreme, with negative results. For example, my niece who graduated high school in Las Vegas sends well over 100 text messages each day. This means that you never have her complete attention. She may be in the same room with you, and she may seem to be paying attention to your discussion, but at least part of her thoughts are elsewhere as her fingers tap away on the mobile phone.

Last year when my niece changed mobile phone carriers, she had to wait 12 hours for her new mobile service to begin. Apparently, for her this break from mobile connectivity was like living without oxygen. She was in a panic the entire time, making these 12 hours seems like 12 painful days of withdrawal for everyone in the family.

These extreme behaviors with mobile phones are easy to fault. But in general, I don't fault mobile phones. I'm a big fan. We mostly use these devices to make our relationships stronger. That's good because strong relationships bring us security and happiness.

On the utilitarian side of things, mobile phones are getting better at giving us access to information and experiences that make our lives easier and richer. Again, that's good. So I give three cheers to mobile phones!

But I'm not cheering for how the online world is affecting our lives. My primary concern is how online services are changing our social landscape. Thanks to social networking and other online communication channels, we can meet and connect with people easily – too easily, in fact. The online services today, from Facebook to eBay to LinkedIn, make more profits when you connect with many people online. So online services are designed with this bias in mind: quantity over quality. While we're busy making many new friends, we have less time to deepen existing friendships with people who really matter. In other words, today's technology makes quantity of relationships easy and rewarding, while quality is difficult to achieve.

We are living, more and more, in a world of mere acquaintances. That's not good. As human beings, we benefit more from strong relationships in a community of people who know and trust each other. Quite the opposite is happening today online. We are forming weak relationships in a vague community of people who don't know each other well. These online services may give the illusion that we're forming deep and lasting relationships, but in reality we are not. They are as transient and fleeting as a mirage in the desert.

So what's wrong with that?

When times get tough (and they always do) these mere acquaintances are not likely to take up our cause. These casual friends – even if we have hundreds of them – aren't likely to genuinely celebrate the birth of our children, to patiently nurture us through cancer, or to truly mourn with us after the death of our parents. And let's be honest . . . we, in turn, aren't likely to make such sacrifices for our casual online friends. It's just too inconvenient and unappealing, especially when we have hundreds of other casual friends whose lives are more fun and interesting at that moment.

But perhaps we shouldn't get too worked up over this trend of quantity over quality. As we get older, we naturally become less interested in creating casual friendships; instead, we seek relationships that have depth and resilience. Consider how this works: A handful of my Stanford students have connected with over 1000 "friends" on Facebook. That's a status symbol today. But ten years from now, I predict these students will have ended their game of collecting friends online. They will eventually cut off the people who don't matter much. (On Facebook, this is called "de-friending.") In fact, soon after students graduate college, they start narrowing their friendships on Facebook. They become more selective. They've tried many options with friendships, and they are ready to spend their time only on those that provide real value and satisfaction.

I propose that this process is a model for what we all are collectively doing today with technology. Many of us embrace new technology tools as they emerge, exploring the new possibilities for our lives. But with time – and with some guidance from experts – we figure out what innovations to embrace and which ones to banish. Along the way, we get faster and more sophisticated in figuring out our needs and which technologies help us fill those needs.

Ultimately, the decision is yours to make. With the new technology tools in your hands and on your desktop, will you strengthen your relationships? Become more physically fit? Conserve earth's resources? Will you pursue a new hobby? Volunteer in your community? Vote for honest and capable leaders who seek global harmony. As I see it, we live in an exciting and pivotal point in the history of the world. The possibilities are nearly endless.

2. The internet, a tool for empowerment?

Nearly half of the US adults and more than a third of the British adults surveyed have internet access at work but it appears that much of what we do online is not work-related. In both countries, only 50% of adults describe themselves as a heavy or moderate user of the internet for work. In contrast, three quarters of adults describe themselves as heavy or moderate internet users for personal or leisure purposes.

In which of the following places do you have access to the internet?


US Kids   UK Kids   US Adults   UK Adults
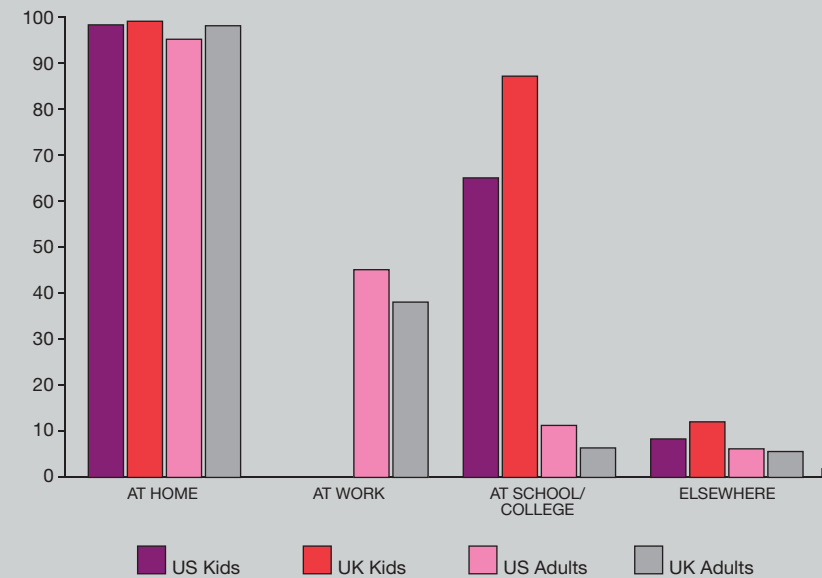
Similarly while the internet is revolutionising education, kids are actually more likely to be surfing than learning...

Around 95% of all youngsters use the internet but it would seem that UK teenagers are more likely to have access to internet at school than their American cousins (87 % v 65%). They are therefore more likely to identify themselves as heavy or moderate users of the internet for school or college work. But in both cases, a significant majority of youngsters (72% in UK and 68% in US) identify themselves as heavy or moderate users of the internet for fun.

When it comes to rating our confidence on the internet, British youngsters are the most highly skilled.

Internet confidence

Which of the following best describes your own personal knowledge of computers and the Internet?

US Kids   UK Kids   US Adults   UK Adults
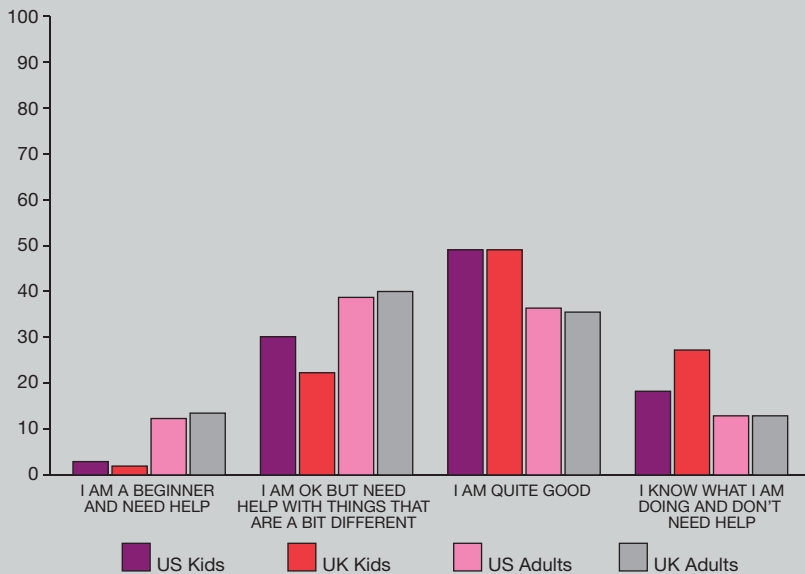
When it comes to rating our confidence on the internet, British youngsters are either the most highly skilled of the four groups, or perhaps just the cockiest! One in four British teenagers rate themselves as being so good that they say "I know what I am doing and I don't need help." Beyond this particularly confident group, there are over 50% of teenagers from both countries who rate themselves as "quite good".

Adults in both countries are most likely to say "I am ok but need help with things that are a bit different" while one in 10 adults in both countries class themselves as beginners compared to just 3% of the youngsters. Again it is more of a generational divide than a geographic one. The geographical divide that is present between the young people, with British youngsters being more the most confident could, as we saw earlier, be attributed to the greater access that British teenagers have to the internet at school.
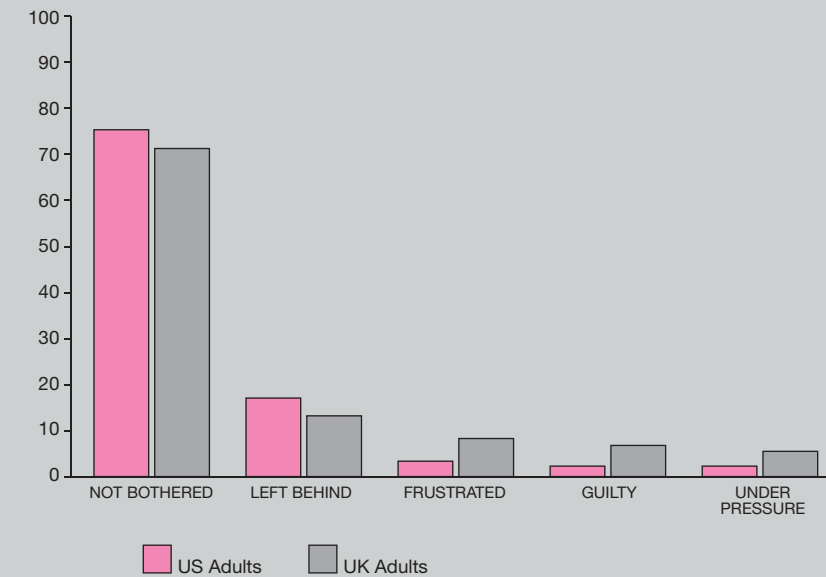
50% of American youngsters and 58% of their British counterparts think that they are more confident than their parents on computers and the internet but 66% of American parents and 61% of British parents think they are the more confident ones, perhaps illustrating that computers and the internet are not something that families do together.

Would you say you are more or less confident in using the internet than your parents?

US Kids | UK Kids

Would you say you are more or less confident in using the internet than your child(ren)?

US Adults | UK Adults
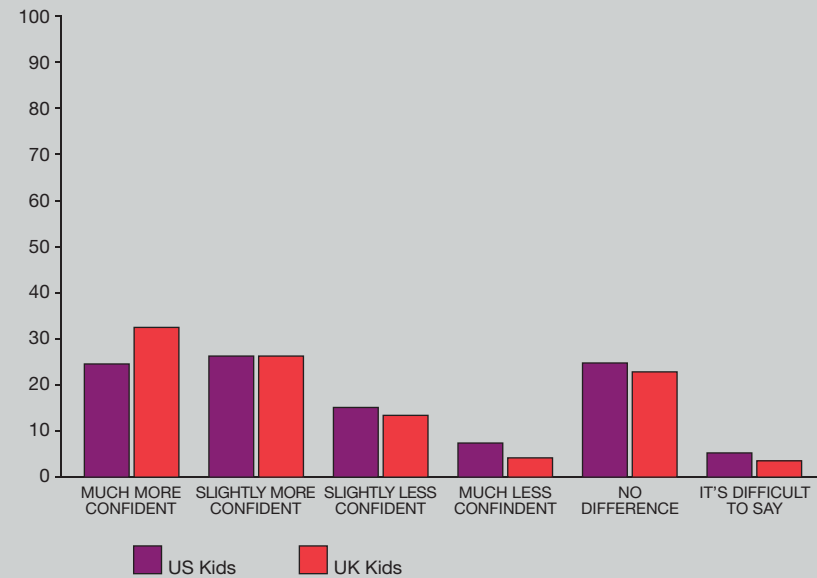
We asked adults who said they were less confident than their children how this made them feel and for the most part people said they were unbothered, although a minority – one in six - said they felt left behind.

And how does this make or less confident parents feel?

US Adults | UK Adults
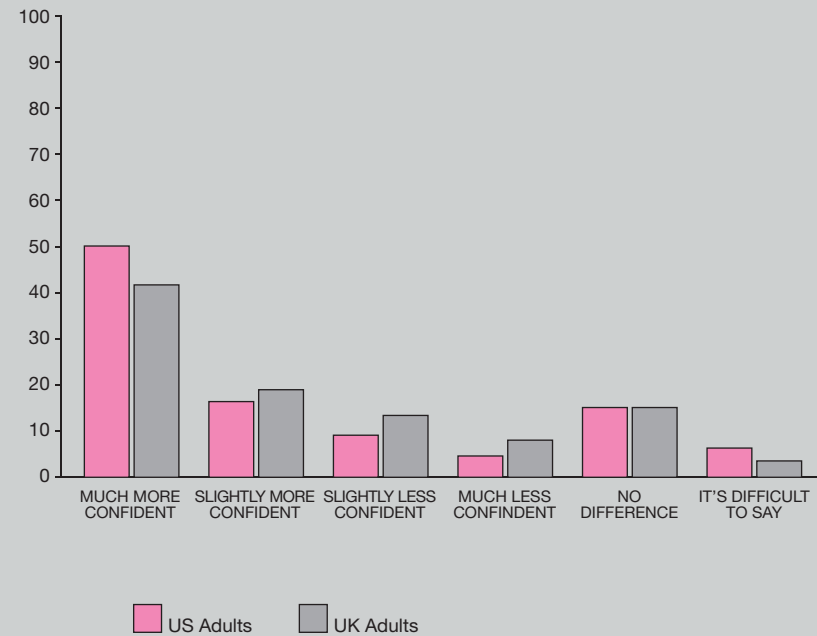
We also asked adults how they felt when they were online. Half said being online came 'naturally' to them, while one in 10 felt 'frustrated' and one in 5 felt 'amazed'!

Below is a list of words that have been used to describe how people feel when using the internet. Which, if any, of these words regularly apply to how you feel online?

US Adults | UK Adults
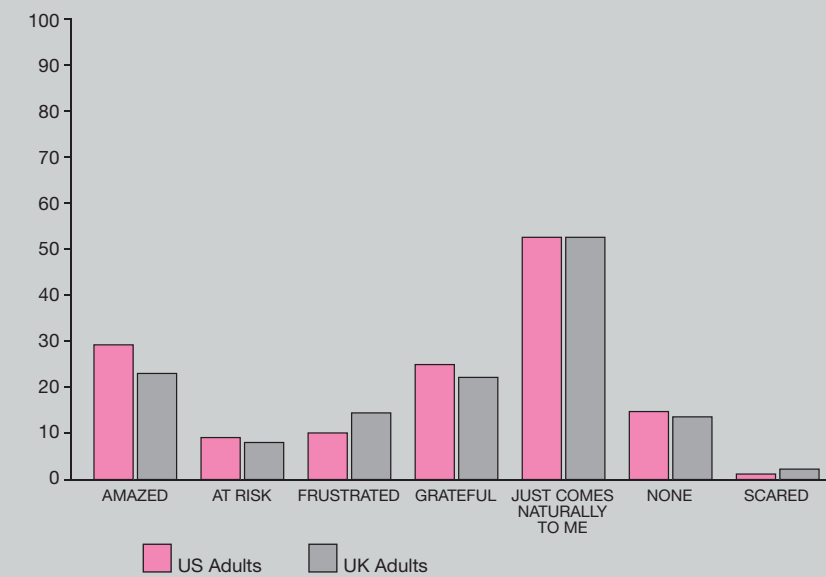
Online activities

As we saw earlier, youngsters' online behaviour is largely driven by entertainment and for most activities there were few differences between young people in the two countries. Emailing friends was the most popular activity (88%), followed by watching videos (87%), or visiting social networking sites (75%) and gaming (74%).

In addition, two thirds are downloading and sharing photos online, half are shopping online and one in three have blogged. Clearly the next generation has a lot to say about themselves, and has a need to share it!

Again, it is British youngsters who tend to be the more sophisticated user, pursuing a greater range of activities online, whether it is communicating by webcam (something 53% of British youngsters have done compared to just 18% of their American cousins) or downloading films (33% of teenagers in the UK against 22% in the US). Skype is used by more than twice as many British young people, while chat rooms are favoured by 61% of teenagers in Britain compared to 47% in the US. Watching television online is favoured by 38% in the UK and 27% in the US. It seems British kids are leading the way and these findings reveal a generation entirely comfortable with trying out a whole range of activities online in search of fun and entertainment.

Interestingly however, American teenagers are more likely to go online to look for factual information, maps and directions (56% of US teenagers versus 44% of British youngsters), and news and weather (63% of US teenagers versus 53% of British youngsters).

When it comes to adults' online behaviour it is a rather less exciting picture with email (93%), maps and directions (89%), news and weather (88%), and shopping (86%) topping the list of activities on both sides of the Atlantic, with banking (75%) and paying bills (71%) not far behind.

However, it is not all drudgery and clearly some adults are also using the internet for entertainment. Almost three quarters have watched videos online, 67% have downloaded and shared photos, half use social networking sites, or play video games online and the same number share music. One in three now even watch TV online.

In the case of adults, as the graph shows, it is the US who lead the way on the range of functions used.

Which of the following activities have you ever done online from a desktop computer or laptop in a home, school, library, internet cafe or similar?

Legend: US Kids, UK Kids, US Adults, UK Adults
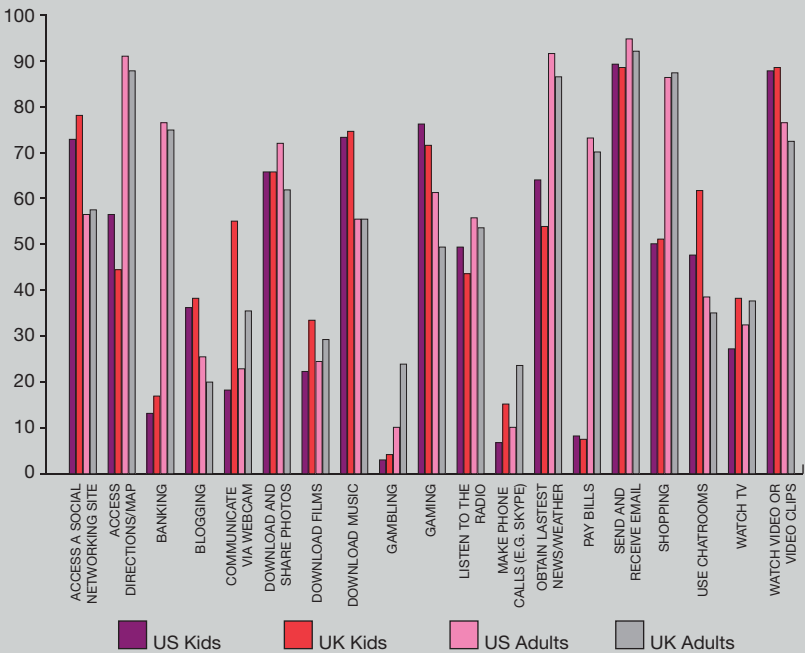
OurTube not MyTube!

Dr Carsten Sørensen, Senior Lecturer (Associate Professor)
London School of Economics and Political Science

While most adults are more than happy to passively consume entertainment from the TV, this is rapidly going out of fashion for the younger generation. They are seeking the interactive experience of shaping what is produced and consumed themselves, either by being much more proactive in selecting what they look at, or by engaging in ongoing social interaction and thereby actively participating in producing content.

The possibility for participating in almost all aspects of the digital sphere is continuously expanding. TV programmes are subjected to SMS voting. Website production is no longer only in the hands of experts. Anyone can daily blog their thoughts or on websites such as twitter.com or jaiku.com micro-blog their movements and feelings minute by minute. Music, movies, and other cultural materials can be semi-professionally manufactured and uploaded to music or video sites. Even development of new services, previously done by the few, is becoming increasingly democratised by generations of web-savvy youngsters.

The desire to participate and the importance of constantly being in touch with peers is both reflected in the fact that one third of the younger generation chose the mobile phone as the most important technology, even higher amongst 17 -18 year olds (42%).

Whereas one quarter of adults nominated the TV as the one indispensable technology they couldn't live without. For traditional media, this represents a significant challenge to capture the attention and interest of a group of viewers who don't see themselves as viewers but more as partners. It also perhaps creates challenges for the children and teenagers themselves. When I grew up in Denmark in the 1960s and 1970s, I only had access to one black and white national TV channel, which I did not have much interest in, but as it was the only thing on the box, I would watch it. As a result I ended up learning through the TV. With hundreds of satellite channels, we no longer have to endure watching programmes we aren't interested in but can happily flick between a multitude of channels therefore perhaps avoid being challenged. Interactive media and instant access to peers allows for much greater consumer control over what we watch, you can choose not to be challenged, not introduced to new ideas, you can choose only to watch the YouTube clips your peers recommend, those targeted at you and your peers only.

The opportunities for tailoring entertainment has, however, also produced a richness of creative genres fully utilising the available technologies to, for example, remix parts of the Marry Poppins movie into a trailer for a thriller "Scary Mary" watched by more than six million on YouTube [1], or surgically removing Garfield from the cartoon footage, leaving the strips strangely surreal and often melancholic [2]. The old media world are increasingly seeking to tap into the emerging online phenomena, for example, making TV personalities out of bloggers such as Perez Hilton [3].

[1]   *http://www.youtube.com/watch?v=2T5_0AGdFic*

[2]   *http://garfieldminusgarfield.net/*

[3]   *http://perezhilton.com/*

Wireless life

Just 20% of US adults and 30% of British adults surveyed currently have a wireless internet connection in their home but this looks set to grow significantly. Of those currently without wireless, 64% of American adults and 70% of British adults say they will consider changing to wireless next time they upgrade or change their connection.

In terms of comprehension, 90% of our adult US sample and 88% of adults in the UK say that they understand what wireless technology refers to. Rather worryingly, many people have not grasped that their wireless transmitter does not know where the boundary of their home lies. One in three of those surveyed were unaware that if you pay for a wireless internet connection for your home - and don't secure access to it with a password - the neighbours will be able to use the connection for free!

Are you aware that if you pay for a wireless internet connection for your home and don't secure it by making access to it password protected, that neighbours and people in the vicinity will be able to use your connection for free?

US Adults UK Adults
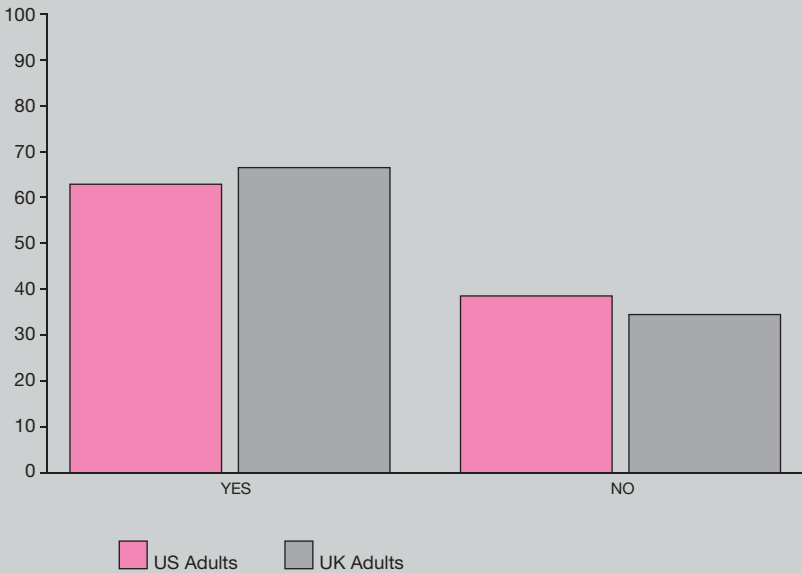
In both countries, the primary benefit of wireless technology was the obvious one - the ability to access the internet anywhere in the house (74%). In Britain, this is closely followed by the fact that it means 'Less clutter and a more organised home, (70%). Perhaps more practically Americans, prioritise 'The freedom and flexibility to work on-the-go and manage a better work/life balance' (57%).

Both countries cited tech functionality as less of a priority 'Easier way of getting technology to work together - no need to worry about connecting and downloading - it sets itself up' (37%) and that it 'Allows you to utilise the multi-media potential of all your electronic devices by transferring data easily around the house' (31%).

From the list of potential benefits of wireless technology below please say which three are most important to you.

Legend: US Adults (pink), UK Adults (grey)

Categories (x-axis):
- ALLOWS YOU TO ACCESS THE INTERNET VIA YOUR LAPTOP ANYWHERE IN THE HOUSE
- LESS CLUTTER AND MORE ORGANISED HOME TECHNOLOGY LOOKS SLEEKER NO WIRES TRAILING ACROSS THE HOUSE
- THE FREEDOM AND FLEXIBILITY TO WORK ON THE GO AND MANAGE A BETTER WORK/ LIFE BALANCE
- EASIER WAY OF GETTING TECHNOLOGY TO WORK TOGETHER - NO NEED TO WORRY ABOUT CONNECTING AND DOWNLOADING - IT SETS IT SELF UP
- ALLOWS YOU TO UTILISE THE MULTI-MEDIA POTENTIAL OF ALL YOUR ELECTRONIC DEVICES BY TRANSFERRING DATA EASILY AROUND THE HOUSE
- BEING AT THE FOREFRONT OF CUTTING EDGE TECHNOLOGY

Which of the following activities have you ever done online using a WI-FI connection? (whilst on the move e.g. when travellin, working on your laptop from a cafe or at an airport)?

Legend: US Kids (purple), UK Kids (red), US Adults (pink), UK Adults (grey)

Categories (x-axis):
- ACCESS A SOCIAL NETWORKING SITE
- ACCESS DIRECTIONS/MAP
- BANKING
- BLOGGING
- COMMUNICATE VIA WEBCAM
- DOWNLOAD AND SHARE PHOTOS
- DOWNLOAD FILMS
- DOWNLOAD MUSIC
- GAMBLING
- GAMING
- LISTEN TO THE RADIO
- MAKE PHONE CALLS (E.G. SKYPE)
- OBTAIN LASTEST NEWS/WEATHER
- PAY BILLS
- SEND AND RECEIVE EMAIL
- SHOPPING
- USE CHATROOMS
- WATCH TV
- WATCH VIDEO OR VIDEO CLIPS

As the graph above shows, US adults lead the way in all Wi-Fi activities except chat rooms, gaming and webcams - all of which are done in greater numbers by British youngsters.
Overall Wi-Fi is still a relatively niche activity, although much more common than going online via mobile phones and the functions being used by adults using Wi-Fi reflect the wider online picture: email, maps and directions, news and weather.
However, one in 10 are also using Wi-Fi to watch videos on the move, download music, access social networking sites or even to go shopping.

One gadget to rule them all?

Dr Carsten Sørensen, Senior Lecturer (Associate Professor)
London School of Economics and Political Science

We are currently experiencing a highly interesting period with regard to personal technology. The computer is no longer necessarily tied to a desk, and, as this study has shown, the laptop is more popular than ever. The phone is no longer stationary either, and the mobile phone is becoming an increasingly complex computational technology. The personal computer is turning into Allan Kay's vision of the Dynabook from 1968 of a tiny flat device [1]. However, the mobile phone is rapidly moving towards the same place from the opposite direction with larger colour screens and more complex touch-screen interaction. Perhaps we are still looking for "the missing link" between the ultra-portable notebook computer and the ultra-beefy mobile phone, which will fulfil most computation and communication needs?

When considering recent technological developments with mobile phones increasingly having 2 or 5 mega-pixel cameras, mapping and GPS functionality as well as high-speed internet access and the ability to play music and video files, the idea of "one device to rule them all" is a tempting one. This is, however, not as simple as it may look. Most of the usage of mobile phones does not point towards much competition between voice calls and SMS messages on the one hand and all other services on the other. The "killer-services" for the mobile phone beyond voice and text has still to be found and although many companies are seeking this in location-based services helping us find our way or find each other, we are still far from understanding how to unlock the true potential of mobile phones. Also, it is maybe less about converged devices and much more about how well the device can conduct each piece of activity. Whilst internet access, playing MP3s and other capabilities have been available for some time, it has taken the iPhone with its easy-to-use functionality to, for example, result in 50 times more frequent Google search than for other mobile phones [2].

We need to question the assumption that all we really want is one device in our pockets or handbags doing everything we need. The data from the Mobile Life report clearly demonstrates that consumers generally feel confident in using a broad variety of technologies for a variety of purposes. The idea that all this has to be done by one device is perhaps an old fashioned idea based on less technology-proficient consumers than the generation growing up with a wealth of technological opportunities.

When the first games consoles were launched, they illustrated the strength of divergence with some of the capabilities of a PC being added into devices designed for a highly-specific purpose. Whereas the personal computer for many children symbolises homework, a games console signals unadulterated fun. The mobile phone has traditionally signalled free roaming and instant social interaction. The more that a mobile phone is associated with a range of other features, its purpose may also become less clear to its users. As Nokia's Jan Chipchase argues when focusing on the basics in life, most people will not leave their home without their house keys providing access to shelter; money allowing purchase of food; and their mobile phone as it simply represents instant access to other people in cases of emergency [3]. The technical advancements of mobile phones clearly indicate that we increasingly classify the ability to take photos, to listen to music, watch videos and find our way as essential needs in addition to connecting with others.

[1] *Wikipedia (2008): Dynabook. http://en.wikipedia.org/wiki/Dynabook*

[2] *Palmer, Maija and Paul Taylor (2008): Google homes in on revenues from phones. Financial Times, February 13th, 2008.*
http://www.ft.com/cms/s/0/667f13de-da60-11dc-9bb9-0000779fd2ac.html

[3] *TED Talks (2007): Jan Chipchase: Our Cell Phones, Ourselves.*
http://www.ted.com/index.php/talks/view/id/190

Internet on holiday

American adults are so committed to internet use that the majority still use the internet while on holiday (53%). The British are slightly less addicted but 39% of British adults also use the internet while on holiday.

What do you tend to access the internet for when you are on holiday?

US Adults / UK Adults
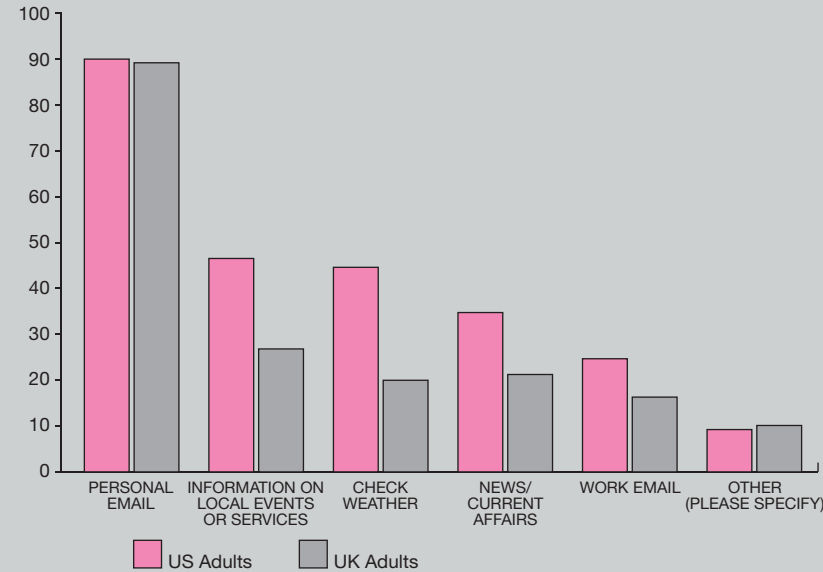
While some of their surfing seems geared towards their break - looking for local information or checking the weather - the most common activity is checking personal email. 90% of people who go online on holiday check their email - it seems we just can't bear to be out of touch! Being in constant touch with family and friends has become so much the fabric of our lives that for many people even a holiday would be incomplete without some online interaction. However, it is not all leisure activities, one quarter of American adults go online on holiday do it to check their work emails, and the same is true for one in six of UK adults. So much for a work life balance!

Internet advantage

Around 30% of adults and 40% of young people feel that 'Children who don't have internet access at home are at a disadvantage when it comes to their social lives'. Consider education and that feeling is much stronger, 80% of youngsters agree that 'Children who don't have internet access at home are at a disadvantage when it comes to their education'.

Three quarters of adults and a convincing 90% of children believe that 'Schools these days expect children to have access to the internet at home'. These findings could be some cause for concern - are we sleep-walking into a two-tier education experience where kids from families without the means to provide internet access at home are greatly disadvantaged?

We also found a belief that the internet is helpful when it comes to children developing new interests. More than 50% of adults and children alike believe that the internet 'encourages children to find new interests'. Given how crucial it is to develop a broad range of interests early on in life and how central a role this plays in enabling us to lead happy and fulfilling lives both professionally and personally, this is a striking figure.

In addition, 77% of adults on both sides of the Atlantic agree that the internet 'means children today receive much better information than I did in my day'. A positive sign for the ability of the next generation to make positive and well informed choices.

How much do you agree or disagree with the following statement? The internet means children today receive much better information than i did in my day.
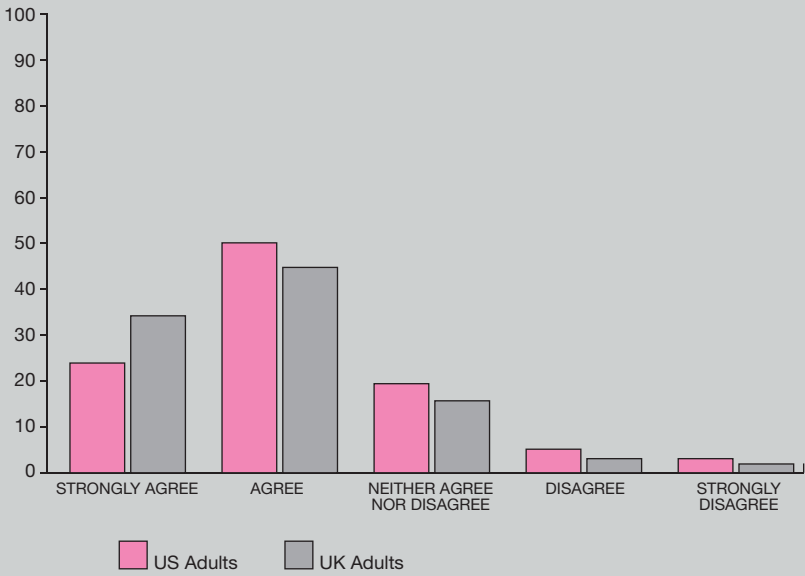
US Adults / UK Adults

A right to the net

Our research shows that the internet is now seen by many virtually as a human right – one in two adults in both countries agree that 'Having internet access in the home is an essential, like having a fridge or a cooker' and 50% of US adults and 40% of UK adults agree that 'The Government should spend taxpayers money to make sure that children whose parents can't afford internet access get it'.

Do you think the government should spend taxpayers money to make sure that children whose parents can't afford


US Adults / UK Adults
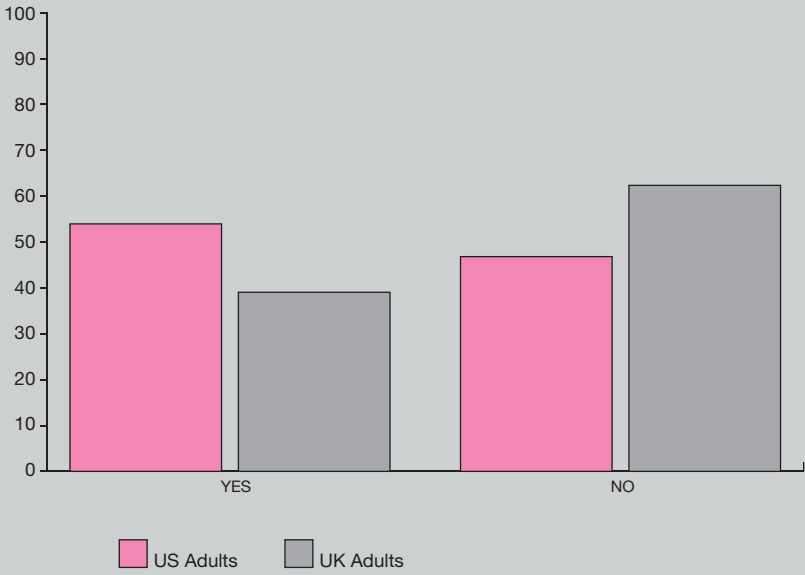
Internet and relationships

Many people have debated what the longer term impact of time spent online on our ability to maintain real-life relationships and our results make interesting reading.

Almost 20% of the youngsters surveyed said they preferred chatting to friends online than face-to-face. Perhaps the internet allows for more open discussion, takes away embarrassment and awkwardness and allows more intimacy. Or, a less positive interpretation might question whether communication of this sort really allows for development of the empathy and connection so crucial for learning rounded social skills.

Thinking about time you spend socialising with friends please say whether you prefer to:

- US Kids
- UK Kids
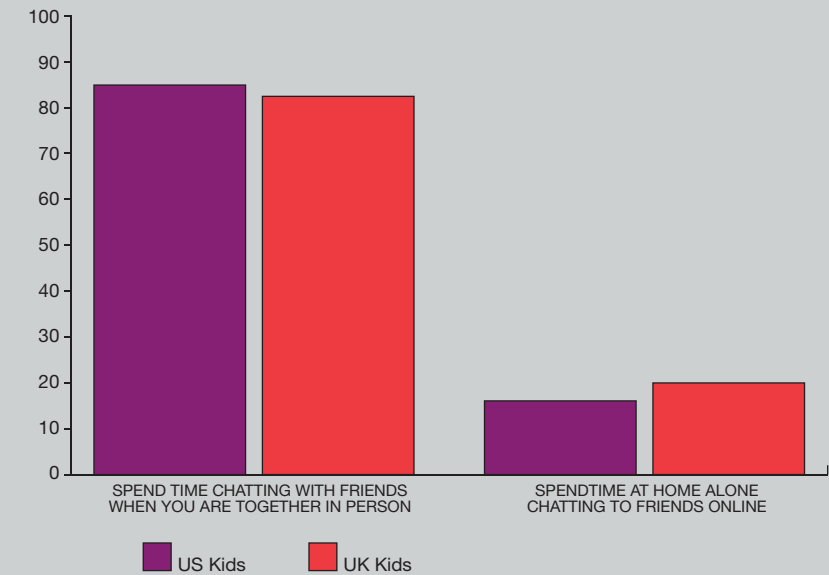
When asked about the potential impact of increasing online activity 46% agreed that it would mean 'People will form fewer face-to-face relationships as a result of the internet'.

It seems there is also some cost to family life since 40% of UK kids and slightly fewer in the US say that the internet means they spend less time with their family. Similarly 30% of adults feel they spend less time talking face-to-face with friends and family as a result of internet.

This effect can be the cause of conflict: One in three UK kids and one in four in the US argue with their parents about how long they spend online. The same is true of adults, although in smaller numbers since 10% argue with their partners about how long and what they look at online.
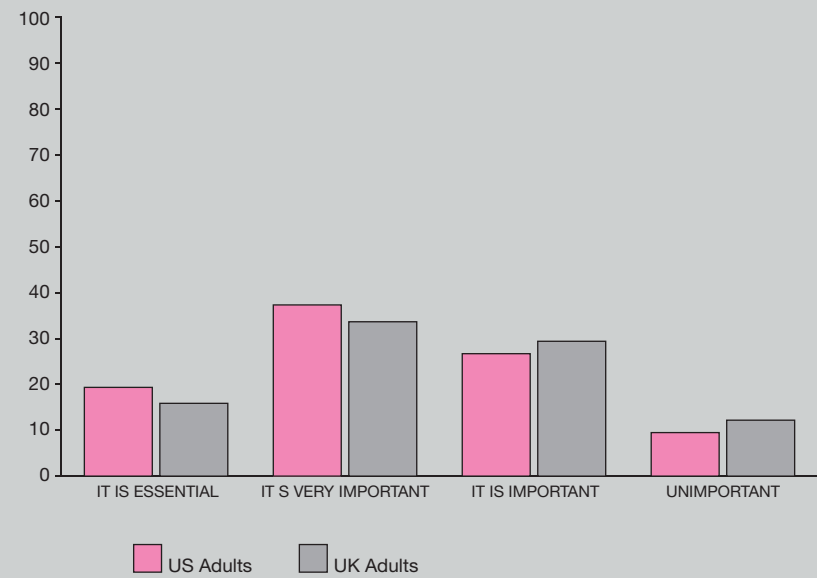
Despite these negatives, the majority of people are unequivocal when it comes to the importance of the internet: 55% agree it has vastly improved their lives - a very strong word. Despite the concerns we have seen about relationships, one in three adults say the internet is important when it comes to making new friends and meeting new people. A quarter say it is essential for keeping in touch with existing friends and family.

A rather mixed picture emerges and it appears that the effects of the internet in the home are varied and dependent on the context. In terms of relationships inside the home, it may be that the internet serves to fragment family life with children retreating into their bedrooms to surf the web rather than watching TV with their parents in the front room. Partners meanwhile are arguing about what their other half is doing online alone!

In terms of maintaining wider networks of family and friends outside of the home, and especially in the case of reaching out to new people, the internet is clearly paramount.

How much do you rely on the internet for each of these things? Helping you to keep in contact with friends and family.

Legend: US Adults, UK Adults

X-axis categories: IT IS ESSENTIAL, IT S VERY IMPORTANT, IT IS IMPORTANT, UNIMPORTANT

by Rachel Hunter
TV personality and modern-day mum

A transatlantic mum on the digital day-to-day

I need to start with a confession. Although I'm a TV star (in fact I'm writing this on the set of Celebrity Circus), I now spend more time surfing the net than I do watching TV. I just find the internet so useful – I'd rather be actively surfing for things, as I like to keep myself busy. My time is more precious to me than ever, so spending my free seconds online just feels like a better use of my downtime. For me, technology really gets it right when it helps me do something I just wouldn't be able to do without it. I'm still amazed at how much you can find out on the internet, almost without trying.

I couldn't honestly say I'm excited by technology itself, but I do find what you can do with it amazing – like the speed at which you can find inspiration for an outfit. I'll always use the net to give me ideas, from clothes to bigger projects like remodelling the house. I'm also an avid reader of news online and love how quickly you can find out about a breaking story. The one side of the web I've not let myself explore is shopping! It's not because I don't trust the net, more that I'm not sure I can trust myself, as once I got going with online spending I'm not sure I'd be able to stop. I do feel pretty confident on the web as I use it so often, although I do still feel a little unsure on my own website. I'm really not that great at uploading pics or blogging – but I do want to get better.

It still fascinates me that in just a few minutes you can publish things online that look like a designer has spent hours on them and I'd love to be able to master the hang of that!

I'm an eager surfer, but I also really rely on technology for communication. I know a lot of people say it, but I really can't remember what I did before technology advanced so much. I'm a real believer in the positive benefits of modern communication technology – it's just so much easier to stay in touch with friends and family. Sometimes you just want to send someone a text, because it's easier than talking to them – but this has got to be better than not talking to them at all! I really don't see texting as anti-social – it's just quick. I also think there are some people that find it easier to communicate via email and text than in person. I've got friends that find it easier to express themselves in writing and sometimes send the most beautiful emails. Email allows people to become great writers, opening up the conversation in ways that wouldn't happen if we were face to face. Technology helps us talk to each other better.

I do love being able to email my mum in New Zealand – and especially being able to send her the pictures that make her feel like she can touch her grandchildren.

Technology has also made my work life better. In particular it is great for giving quick and simple responses. In fact, having a BlackBerry has radically changed my work capacity as it makes it so easy to send 'yes' or 'no' immediately – there's no need for a long extended conversation – you can get those quick responses to urgent questions, just when you need them. And you have a record of what's been said too – if things get sticky, there's nothing like having that email chain to back you up.

I do text my kids. I think I use my phone as a kind of safety device. It's really reassuring to me to know I can always get in touch with them. When I was young I could disappear into the bush for hours with no contact, but the world has changed. I don't know how parents can cope these days without mobiles. I've also seen those programmes where people's lives are saved because they've been found by their phone's GPS or because they had their mobile in emergencies and it's always at the back of my mind that I'm able to get hold of my kids, no matter what's happening. Thankfully though, I only really use their mobiles to keep a track of them – through those short little snatches in text-talk. Actually, I talk to them quite a lot through text – but I don't think I've ever properly emailed them, other to send them some funny picture or video. For me it's like text is for family and email is for work – although okay, I do love being able to email my Mum in New Zealand – and especially being able to send her the pictures that make her feel like she can touch her grandchildren.

Although I love the internet, I can see that it's both positive and negative; it very much depends on who is using it. As a celebrity Mum, I'm really conscious of what my kids put up about themselves online – and the web footprint they create. I have talked to them quite a bit about the potential risks of the internet. Kids are much more clued up than adults about the web and know this technology much better than I do. I can tell them what's right or wrong, but the new online world is so different that as a parent, you can't expect to know the right answers – or even the right questions. For me, this means it's vital to have open conversations with my kids about these issues. There's only so much you can do to protect them, but I feel that if they know they can come to me about anything they find online then I'm protecting them as best as I can. And as they seem to spend more time online than I do, it's really important that I feel their web exploring is an open book, where they respect the guidance I've given them and where I know they're being careful.

In fact, all in all I think my kids are safer at the moment than I am, their surfing is definitely far less dangerous than the trapeze or the high wire.

One third of the adults we surveyed admitting checking their partners' email, or internet search history, and one in 10 has done the same to a friend.

Internet and privacy

How private is your email? After we have exhaustively checked and re-checked our own email, it seems many of us are not averse to looking at the email inboxes of others! One third of the adults we surveyed admitting checking their partners' email, or internet search history, and one in 10 has done the same to a friend.

If our bosses were to do the same to us there would be a lot of trouble however! More than half of UK adults (58%) and 69% of US adults have sent an email from their work account that they believe would get them in to trouble if their employer saw it.

We can probably speculate that the higher US figure reflects the stricter legislation regulating behaviour in the workplace. Either way, people are taking a significant risk since nearly 70% in the UK and 60% in the US believe their employer has the legal right to check their email account, even though 70% in both countries believe it is morally wrong.

Have you ever sent an email from your work email account that would get you in trouble with your employer if they saw it?

■ US Adults ■ UK Adults
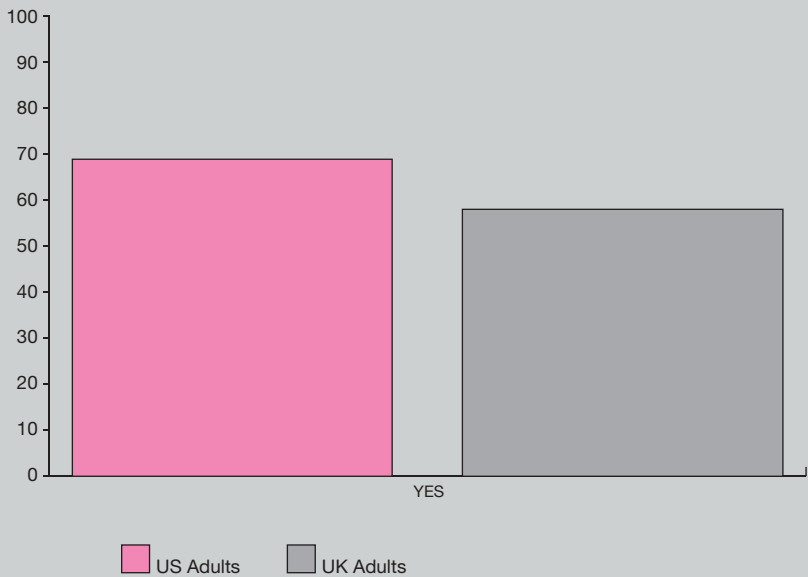
In your knowledge or opinion, do you think that your employer has th right to look at your emails: Legally? Morally?

■ US Adults ■ UK Adults
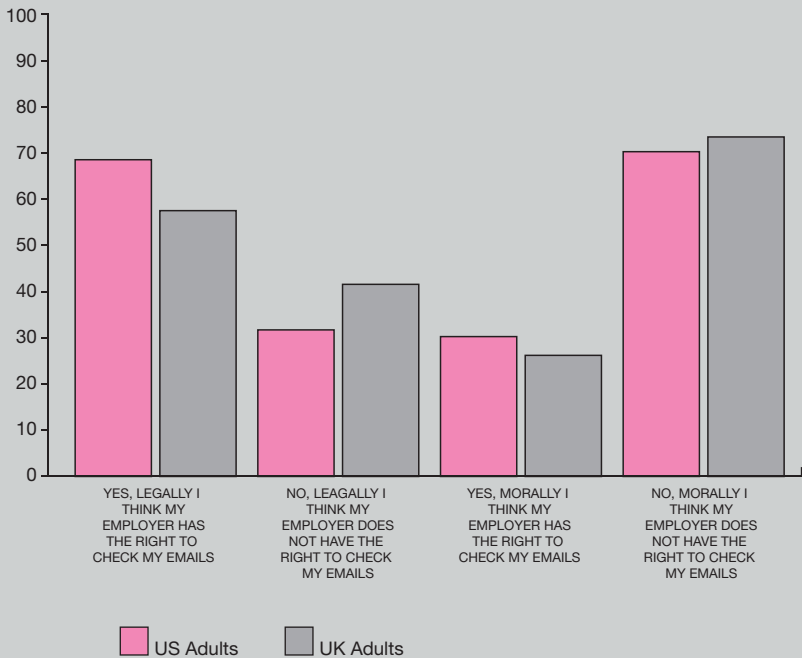
This casual attitude to what we send via work email also appears to extend to what many of us post online; a third of adults also said they did not consider what future employers or colleagues might think when creating or uploading content about themselves on a social networking page, photo sharing site, blog or similar.

Parental controls for online behaviour

Just 40% of parents we surveyed use security software to control their children's online activity, however on the basis of our findings some people might say this figure should be increased. Of those that don't currently use it, 55% of parents felt control technology was 'unnecessary' and 5% didn't know how to put such controls on.

Interestingly a high 87% of parents believed that they were fully aware of what their children access online and 86% said they were confident that their children do not access anything they would disapprove of.

British parents appear to be the most trusting with 46% of British children saying their parents never supervise their online activity; the same is true for 32% of their American cousins.

Around one in three parents in the US and one in four parents in the UK have checked their children's emails and 42% of parents in the US and 31% of parents in the UK have checked their internet history. Of those who checked, one in four found something that concerned them, in the majority of cases unsuitable or adult internet sites.

Perhaps it is not surprising that so many parents found something they were unhappy with as they are clearly not as aware of what their children are exploring online as they imagine, one in two British children and one in three American youngsters said they pretend to be doing school work online while actually surfing the net and nearly one third of children say they would be in trouble if their parents knew what they were looking at.

Around one third of youngsters in both countries are interacting with strangers online.

If your parents knew exactly what you have looked at online or what you use the internet for, do you think you would be in trouble?


US Kids   UK Kids
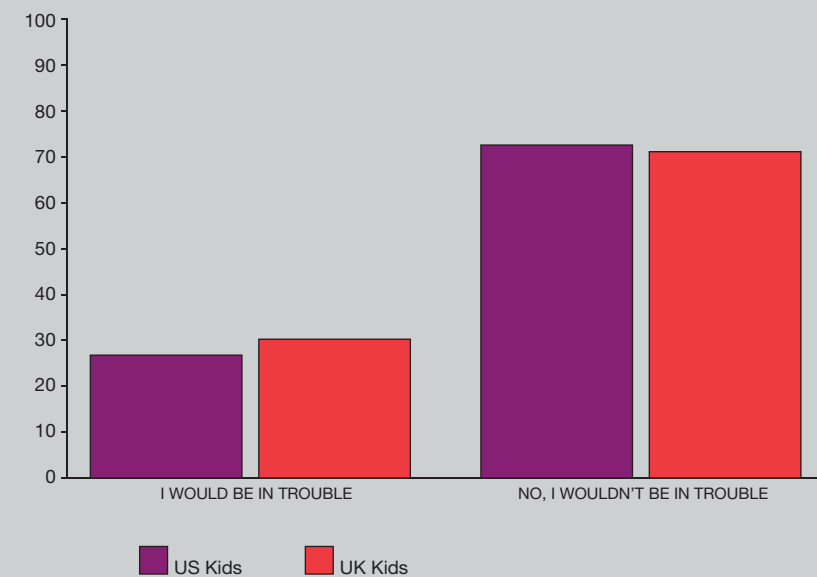
Danger online

Of the parents we asked, 9% said their children had told them about inappropriate or worrying advances people have made towards them online. However, that figure rises to 14% (1 in 7) when we asked kids directly if they had ever found themselves in a situation online which made them feel uncomfortable or uneasy. The most common situation described was that a stranger had tried to make contact in a way that unnerved them.

Even more startling is the number of children who interact with strangers online. The chart below shows that around a third of youngsters in both countries are interacting with strangers online.

Do you interact with anybody online who you did not know in person before meeting them online?
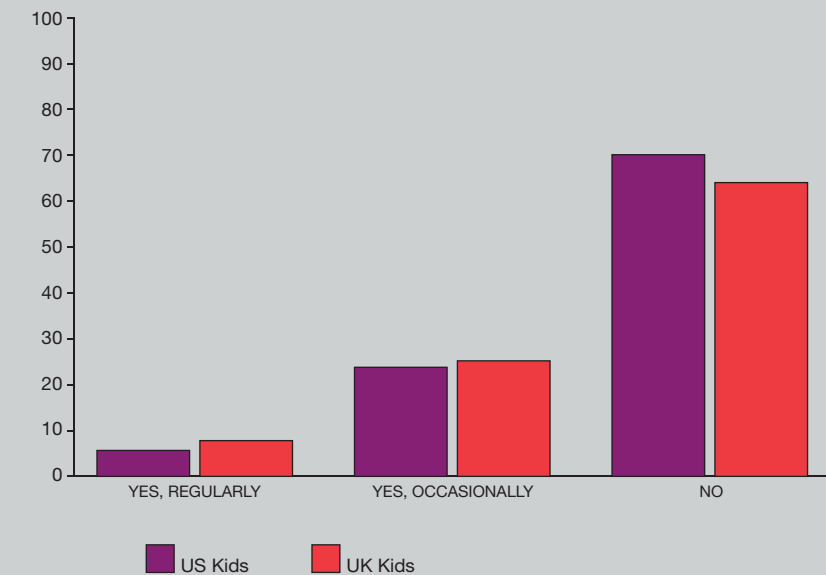
US Kids   UK Kids

Furthermore, as the following charts show, 5% of American youngsters and 9% of British kids have contacted someone online then subsequently met them in person. This may include friends of friends - we can't tell from this data - but it highlights the trust and familiarity that are built up online.

Furthermore, as the following charts show, 5% of American youngsters and 9% of British kids have contacted someone online then subsequently met them in person. This may include friends of friends - we can't tell from this data - but it highlights the trust and familiarity that are built up online.

Have you met someone originally online, e.g. in a chat room or on a social networking site or similar and then met them in person?

US Kids   UK Kids
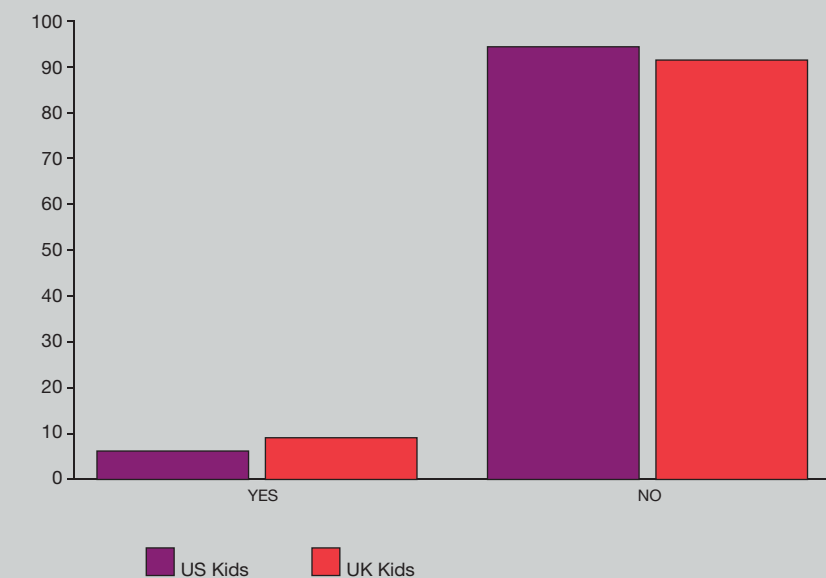
27% of British youngsters and 20% of American kids admit to deliberately looking at adult content websites and a further 22% have done so accidentally, while the figure for boys who have deliberately looked at adult sites rises to one in two.

Do you ever access websites which are meant to be for adults only?

US Kids   UK Kids
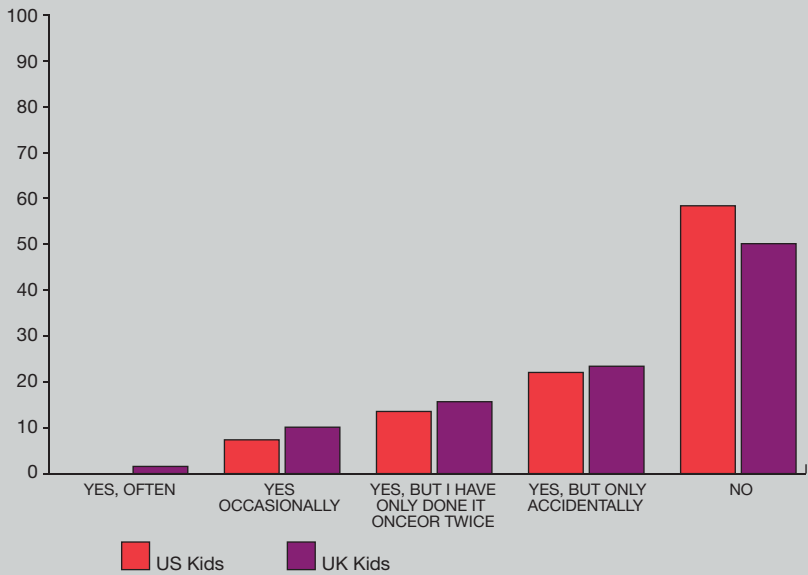
It is not just looking, 10% of British youngsters conduct sexually explicit conversations online with people they know (6% of youngsters in the US) and 1% in both countries do so with strangers. It's a small proportion but it does mean that 1 in every 100 kids are involved in interaction of a sexual nature with strangers online.

It seems that parents need to ensure there is an open dialogue within families about the internet and its potential dangers, and that in some cases increased vigilance would be appropriate. Security controls will be effective in some cases but with 48% of British children and 39% of American children saying they would know how to remove controls, they are clearly not a watertight solution.

Do you think you would know how to remove parental or security controls from your computer/laptop at home?


US Kids   UK Kids
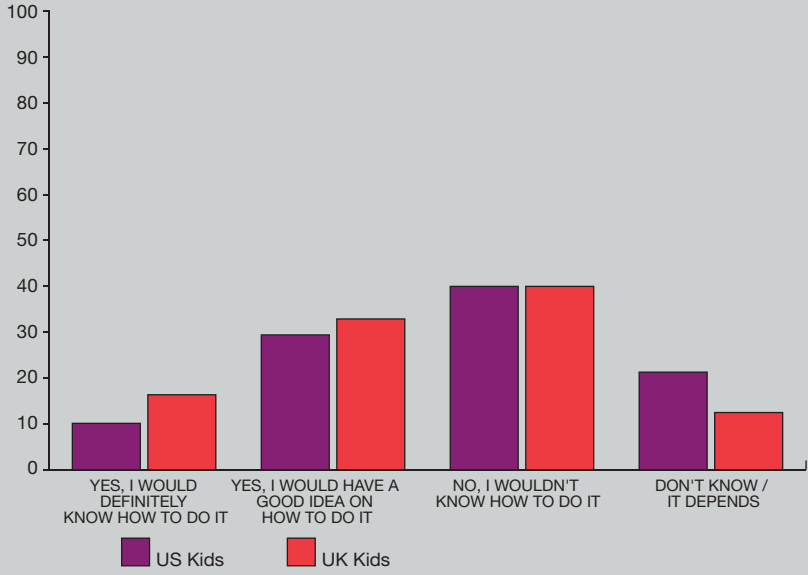
Half of youngsters in the UK go online to search for advice.

Advice online

We also shouldn't forget that the internet has some very real positives for young people, not just in terms of education and entertainment but also as a valuable source of advice. Half of all youngsters in the UK and a third in the US go online to search for advice. In the US, the most commonly sought help was for friendships (39%) and medical issues (28%) while in the UK this was reversed, medical issues (37%) and friendships (27%). Of course, relationships with the opposite sex were high up the list in both countries with 28% of American youngsters and 20% of British youngsters having sought advice on relationships or sex online. Family relationships were also well researched on the internet.

What do you go online to get advice about?

US Kids   UK Kids
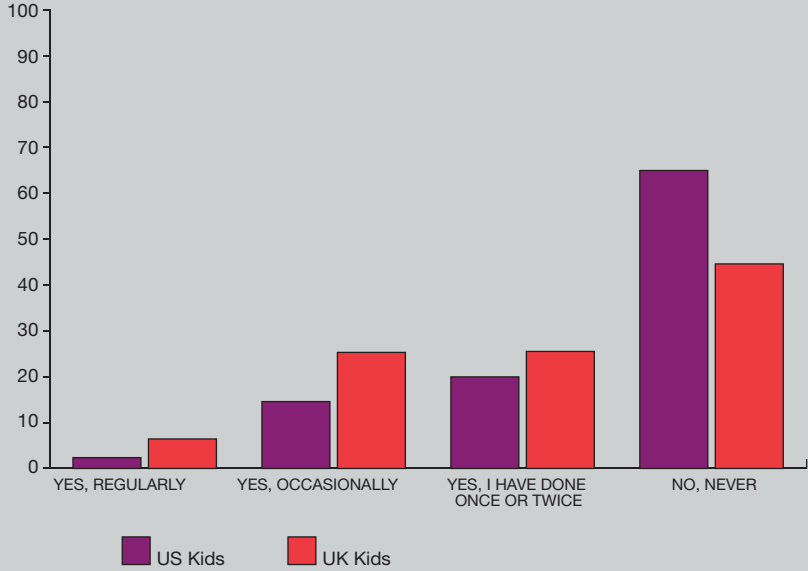
We also asked our young respondents whether they would feel able to approach a friend, parent or teacher to get advice about a medical or relationship worry if they did not have access to the internet. A worrying 20% of British children said the answer would be no, compared to 10% in the US, illustrating how valuable the anonymity of the internet can be for sensitive teens!

by Dr Tanya Byron
Bsc, Msc, PsychD, Consultant Clinical Psychologist
and author of the Government Review:
The Byron Review - Safer Children in a Digital World (2008)

Children & Child Safety

Technology has revolutionised how we communicate and share information: today we can all communicate at greater speed and via a plethora of platforms. The internet brings us web 1.0 with the capability to send information via email and to search the vast world wide web for whatever we wish to know about, wherever it is. More recently, web 2.0 enables not only the sending and downloading of information but also the creation, uploading and distribution of content (written, visual and audio visual) via, for example, user generated content and social networking sites. The sharing of information has become more democratic via the blogs and Wiki's and our children can learn, research, contribute to and create content in ways that we as adults could never have imagined. Indeed, at the vanguard of this new technology are our children. Some 99% of children aged between 8 - 17 access the internet (Ofcom, 2008) and 51% of 10 year olds and 70% of 11 year olds own a mobile phone (Mobile Life Report 2006).

The internet brings incredible benefits and opportunities to us all, especially the young - education, research, communication, play - but it also brings risk; indeed opportunity and risk are highly correlated. Via the internet you can make new friends and experience new cultures - this brings opportunities to broaden cultural understanding and tolerance.

However, alongside this when meeting new friends online, the vulnerable can be manipulated by those exploiting the anonymity of the web where not everyone is who they say they are. Indeed, The Mobile Life Report (2008) reveals that 1 in 3 UK children interact with strangers online; 1 in 7 find themselves in a situation where they find themselves uncomfortable or uneasy online; and 1 in 10 of the children and young people surveyed report having sexually explicit conversations online.

So how do we interpret these results and manage the anxiety that they undoubtedly create?

The advent of the internet has been greeted with an uneasy mixture of hopes and fears. This reflects to some degree how any new 'media' is accepted by society - Caxton's printing press caused widespread fear about the influence of the written word and the advent of the telephone lead to questions about it's influence as a potential 'moral contagion' to women. Currently there have been growing concerns about the risks posed by online communication to children's safety especially because of: ease of access for users, abundance of material available, ubiquity and affordability, the interactivity of the medium, the potential for information sharing, the anonymity that users can enjoy, and the lack of gate-keepers or authorities that might restrict access (Byron Review, 2008).
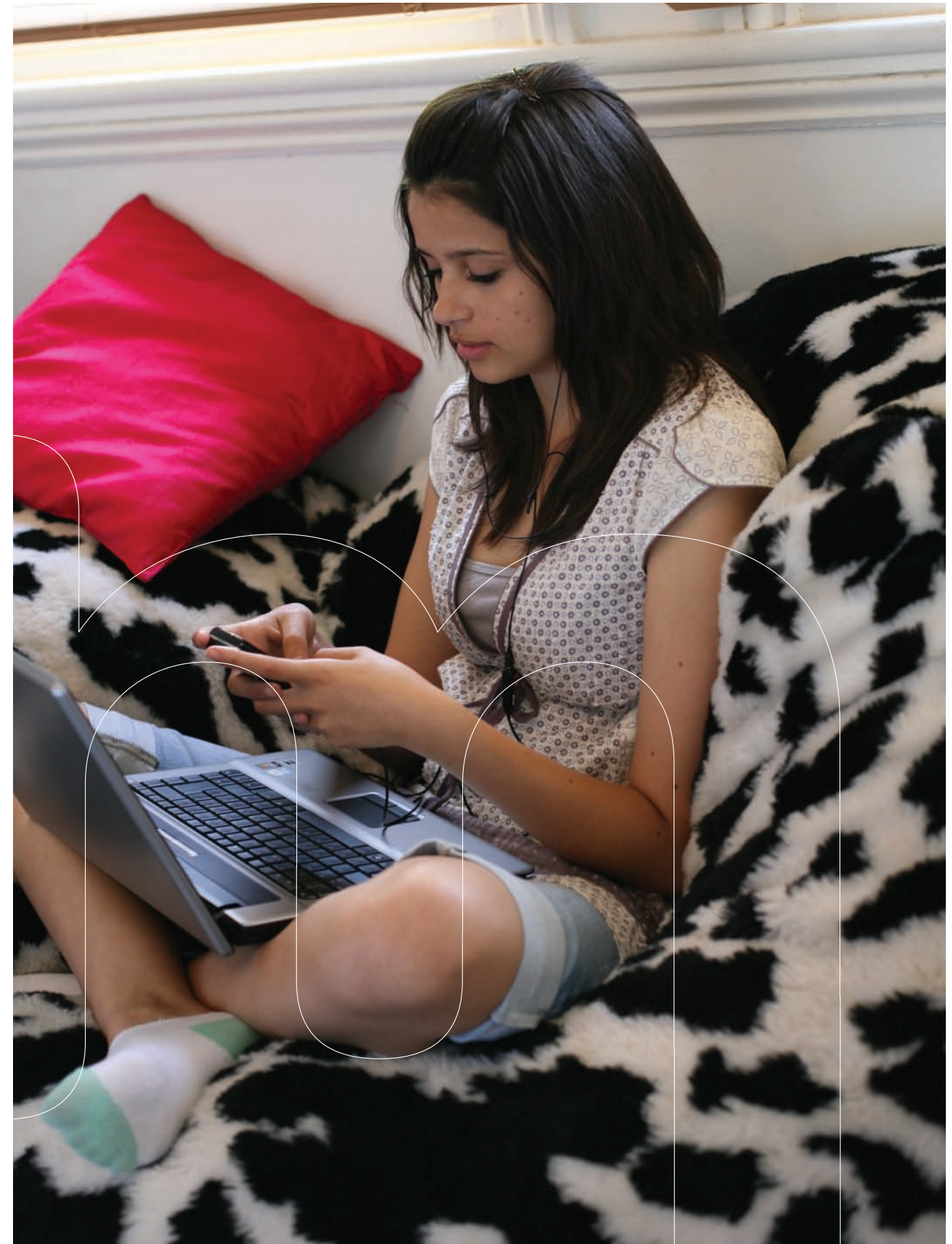
We are, in effect, playing digital catch-up with our kids.

Alongside this there is clearly a marked digital generational divide (Byron Review, 2008) where children, who are growing up with these new and fast evolving technologies, are the digital natives and adults, who have not, are the digital immigrants (Prensky, 2001). We are, in effect, playing digital catch-up with our kids who are marching into web 2.0 while many of us lag far behind in the web 1.0 world. Indeed 1 in 2 children admit to telling lies to their parents about what they are doing online, with 1 in 3 saying that they would be in trouble if their parents knew what they were looking at and 1 in 4 accessing adult websites (The Mobile Life Report, 2008); this all creates an uncomfortable dynamic between our more digitally savvy kids and ourselves as parents, carers and educators. Raising children has become an on as well as off-line task but a frightening challenge when faced with a child who actually can dismantle our adult authority.

Risk is a part of life and parenting/ education is, in part, about enabling our children to identify, assess and manage risk. As children grow, their ability to critically evaluate and manage content, context and conduct (their own and others) improves alongside the development of their frontal cortex. This part of the brain is also involved in managing impulse and regulating social behaviours and clearly immature frontal cortex functioning can be seen in the very young who require constant supervision and management around their behaviour. In addition to this, risk taking is an inherent part of childhood and development - kids will be drawn to situations that are forbidden and experiences that challenge and thrill.

However it is clear that within our 'risk averse culture' many parents, whose anxieties are often fuelled by media scare stories and whose perceptions of the risks out there in the big bad world are significantly negatively skewed, will take a 'zero risk' approach to parenting. This means that most children are now being raised almost in 'captivity' - never allowed to play outdoors
(Gill, 2007).

So if we are inhibiting our children from their outdoor play and thus their ability to satiate their developmental drives to socialise, communicate and take risks, where can they do this? They do it indoors and 'in captivity' - online via web 2.0. And, while children may possess greater technological knowledge and expertise than us, they do not have greater wisdom in terms of risk management because, quite simply, they are children. Indeed as this research highlights 1 in 10 children have met someone in person who they originally met online, for example in a chat room (Mobile Life Report, 2008).

As I pause while writing this narrative and read back over my words, I am struck by how negative this is all feeling and how if anything my comments will do nothing to calm the sea of panic that surrounds the child online safety issue - in fact, they may just swell it. Certainly the Mobile Life Report (2008) also highlights how the majority of UK and US adults do not believe security controls to be necessary for restricting their children's online usage and most have not checked their children's online history but amongst those who have eventually done so, a significant proportion have found something that they were unhappy about. So should we panic and bear down heavily on our children's online behaviour?

Absolutely not. With risk and benefit so highly correlated in this space the more draconian we are in our management of what our children are doing the most they will lose the extraordinary opportunities that the online space offers. The more we stop them accessing the online space, the more they'll find other ways to do so when we are not around - for example via their mobile phones. The more we allow our lack of understanding of web 2.0 and our lack of confidence in our technology skills versus theirs to inflate our anxiety about or denial of the online safety issue, the less we will engage with them on this critical matter.

For most children there are no distinct offline and online worlds - for them this is all one world, one vast space, their lives. They come home from school and instant message (IM) or text the friends that they have spent the six previous hours with. They update their Social Networking Space (SNS) page. They enhance their homework project with information buried in the Library of Congress in Washington DC but accessed from their home. This is extraordinary. Exciting. Incredible. They also might search for information about something they are worried about. They could post a film that they have made with a friend on a user generated content (UGC) site. They might order flowers for someone they have a crush on.

However when they are doing these different things, who has enabled them to think about the implications of their behaviour and the possibility that others might behave towards them in ways that are inappropriate or even harmful? How have they learned to recognise that anonymous communication can lead to very nasty things being 'said' in a way that might not be if the person was sitting in front of them? How have they accumulated the important and necessary skills of critical evaluation to enable them to assess the reliability of the sources they use for information and learning? The fact is that they probably haven't had the guidance and have either learned from each other or via trial and error.

But would you let your children learn how to cross the road from their little friends or via trial and error? No you teach them the Green Cross Code. Now we must all learn and teach the Online Safety Code.

I am a bottle half full, rather than a bottle half empty, girl so I propose that this is and should be an exciting challenge for us and eminently possible if only we could get past our anxieties and insecurities and get talking to our kids. What we must do is teach our children to navigate and swim in these new, incredible, deep and potentially risky digital waters - so let's approach it from that point of view and think about how we teach our kids to swim.

We talk them through the swimming pool rules and show them the safety signs - online this would mean accessing information about safety from the many sources available and tailoring it for our child in our home with our values and beliefs (for example ThinkUKnow [www.thinkuknow.co.uk]; Know It All [www.childnet-int.org]; Direct Gov information [need2know.co.uk]; many Internet Service Providers (ISPs) offer excellent family safety packages and information).

We keep them in the shallow end until they learn to swim - online this would be installing a kite marked filter on the computer and setting it at the highest safety level for the very young and relaxing the filters as our kids age.

We take them to a good, clean, safe pool that has many well trained lifeguards - online this would be helping our children choose sites that are reputable and do take the issue of child online safety seriously and, where appropriate, have fully trained moderators that look out for bad or unsafe online behaviour and a 'report abuse' button if problems should arise.

We teach them how to behaviour in a way that is safe and respectful of others using the pool - online we must help children learn 'netiquette': good manners and respect for others e.g. via blogs, emails, IM and SNS sites.

You teach children the Green Cross Code. Now we must all learn and teach the online safety code.

We teach them not to talk to or go off with strangers at the pool and to tell a trusted adult if they feel concerned by someone's behaviour towards them - online this would mean that when socialising via chat rooms or SNS sites, children should be clear about basic rules of staying safe including:

- how to set their privacy settings;

- that any picture or comment they post is a picture or comment that lives forever in cyberspace: they leave a digital footprint;

- never give details to strangers;

- understand how to report abuse, report offensive materials, make a complaint;

- always feel able to speak to a parent or trusted adult if an online experience has been unsettling or upsetting.

We swim next to our young ones, stay closely nearby - for our young onliners this is putting the computer in a shared family space and monitoring what they are doing.

We let our older competently swimming kids go off and swim with their friends, occasionally checking on them - for our older onliners this would be respecting their privacy but also every so often checking what they are up to.

But kids are kids and they will all at times (some more than others) want to see what they shouldn't and go where they shouldn't - I did as a kid, didn't you? So we also need to have some understanding of their world so that if we pop into our young teens room to 'bring them a cup of tea' and see them snap the lid on their lap top shut or type POS (parent over shoulder) on their IM page, we should talk to them, challenge them, support them - make sure all is OK while respecting their privacy.

Childhood is the time when we can live without the constraints and responsibilities of being a grown - up, it is also a time of naivety and risk taking. Offline we manage this in our children mostly with confidence because we ourselves have experience of the offline world risks. Online we don't.

But we must.

It seems a huge and onerous task - another thing for parents and schools to 'do' - but it mustn't be because not only do we get to acquire new technology skills for ourselves but also we get to seek advice from those who know. And I suggest the best place to get help and learning support is with your own little experts - your kids.

I could go on and on but my time is up because I have to IM my daughter Lily (13) who is upstairs online with her friends to let her know supper is ready and then send a text imparting the same information to my son Jack (10), and who is plugged into his ipod in his bedroom.

In some ways, technology has made parenting easier - at least you don't have to yell upstairs!
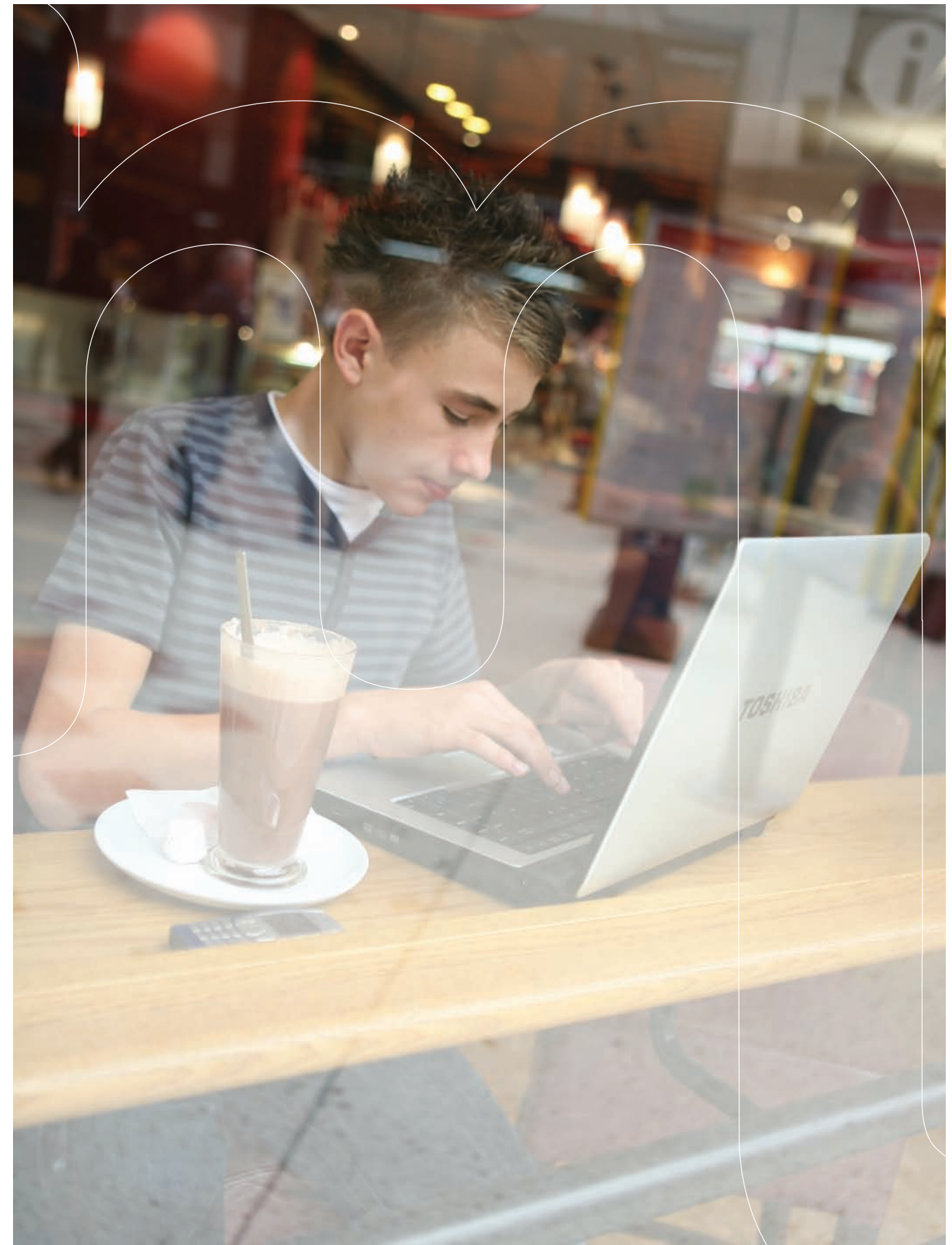
3. Technological Conscience

Beyond what all of this technology enables, how it changes and enhances our lives, there are also questions of responsibility; social responsibility, environmental responsibility and the potential impacts on our health and the health of those around us.

Mobile dangers

It seems that mobile bullying is more commonplace in Britain. Some 13% of British teenagers have had to change their number to stop unwanted texts or calls (compared to just 6% in the US).

The research also uncovered a possible downside to the more sophisticated mobile phones owned by British youngsters. 14% of British teens reported having had a mobile phone stolen compared to 9% of US youngsters. In fact, it appears that mobile crime is more rife in the UK overall with British adults twice as likely to have had their mobile phone stolen - 15% in the UK versus 7% in the US

Have you ever had your mobile/cell phone stolen?

Legend: US Kids, UK Kids, US Adults, UK Adults
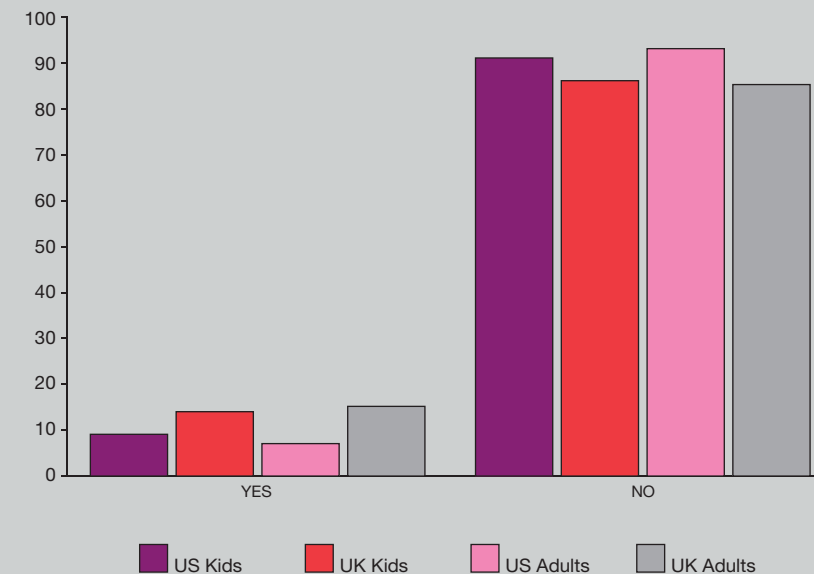
Wi-Fi environment

We must consider the environmental impacts of all this technology- how tuned in to the environmental debate are the different generations in both countries?

We asked young people when they turned off their computers. Was it:

a) as soon as they stopped using it.   b) at night or.   c) they leave it on most of the time.

From our findings, it would seem that the energy saving message is penetrating Britain but less so in the US. More than half of British youngsters, (55%) turn off their computers whenever they are not using them. Almost a third switch it off at night and only a lazy 14% leave their computers on most of the time.

However, in the US, the largest group, 39% of young people, said they left their computers on most of the time and a quarter only switch it off at night.

13% of British teenagers have had to change their number to stop unwanted texts or calls.

When you've finished using a computer or laptop, what do you tend to do?

Legend: US Kids, UK Kids
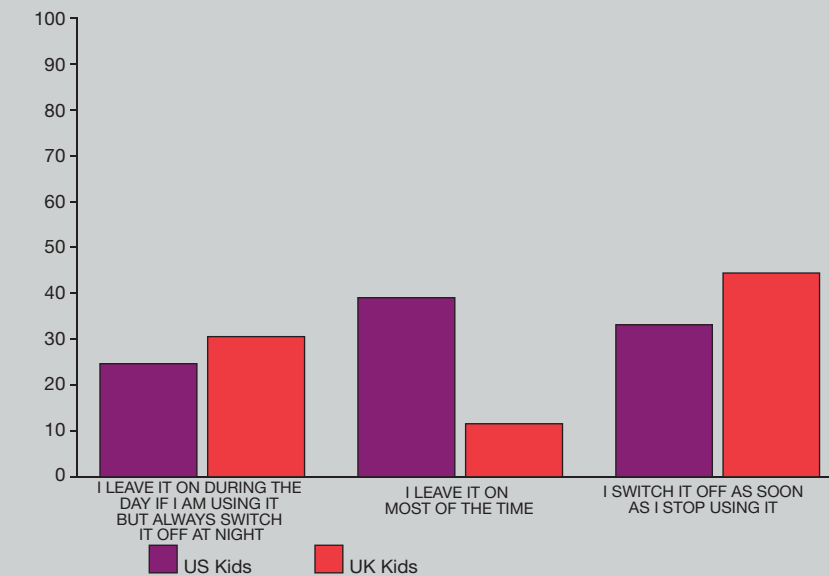
American adults do however appear more environmentally concious when shopping. While a majority of adults in both countries claim they 'will consider the environmental/social credentials of a company or look for specific environmental labels when purchasing their next computer,' it is a larger majority in the US - 61% compared to 55% of British adults.

We also asked adults what they did with their last mobile phone and their last computer when they replaced it. In both countries, it would seem we hoard our technology – 33% kept their last phone as a backup and perhaps most surprisingly 20% kept their last computer for the same reason. On the positive side, 40% of adults recycled or gave away their old computer and 41% of UK adults and 28% of American adults gave away or recycled their last mobile phone.

Health

The research uncovered a moderate amount of concern about the potential health impacts of mobile technology. Just 4% of American adults and 10% of British adults a lot about whether their child's mobile might damage their health. A further 17% and 24% worry about it a little. Similarly while only 2% worry a lot about their own health in relation to mobile usage, 17% (US) and 20% (UK) worry about it a little. How does this compare to previous reports?

There are some concerns regarding wireless technologies and health - 29% in the US and 34% in the UK are 'concerned about the potential impact wireless technology may have on people's health'.

Are you concerned about the potential impact wireless technology may have on people's health?

YES   NO, I AM NOT CONCERNED

◼ US Adults   ◼ UK Adults
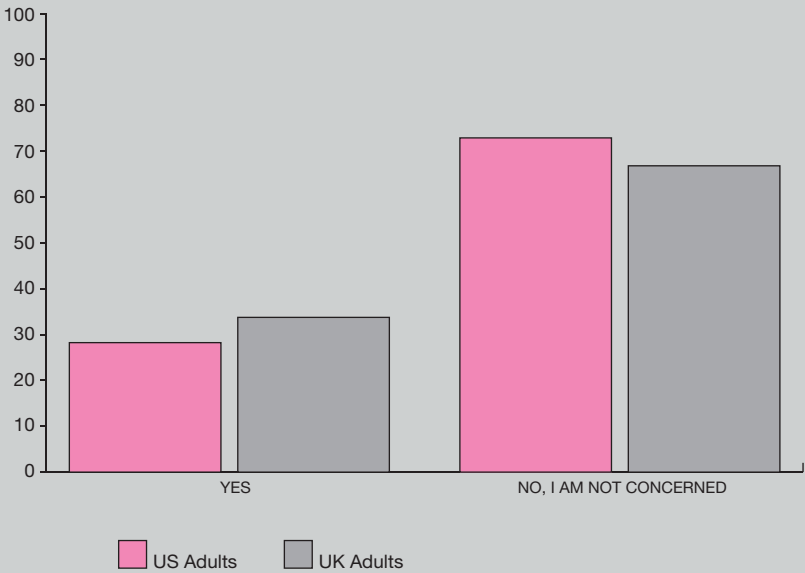
New technology and the future

As technology increasingly enables us to entertain ourselves from the comfort of our own sitting room and also to work, learn, chat and shop from home, will we ever go out of the house? We took this opportunity to ask adults what they think the most likely developments will be and what impact these will have on wider society.

The first finding was that not everybody is interested - one in three say they don't even try to keep up-to-date with new technology developments and products interestedmost attributing this to lack of interest.

Nearly one in five of us (18% of American adults and 19% of adults in the UK) believe that 'development of new technology will mean that in the future, there will be no need for children to learn how to write by hand'.

Nearly one in five of us believe that 'development of new technology will mean that in the future, there will be no need for children to learn how to write by hand'.

The following statemants are predictions that some people have made about the impact and future of technology. Please say how much you agree or disagree with each. "The development of technology means that in the future, there will be no need for children to learn how to write by hand"

AGREE

◼ US Adults   ◼ UK Adults
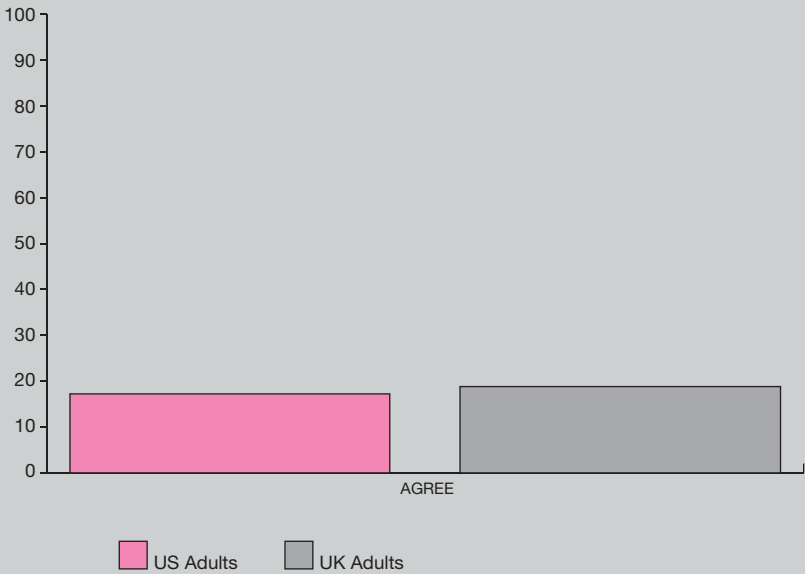
One in three believe that technological developments will mean that correct grammar and spelling will become unimportant.

We also looked at some more functional predictions about what technology may or may not enable us to do in the future – and whether these were desirable:

	Percentage who would like the prediction to be correct:		
	US	UK	Average
The whole country will be a Wi-Fi zone so you can access the internet from your laptop anywhere (as long as your laptop is enabled)	67	65	66
Most people with office based jobs will work from home because technology will allow us to interact through video screens, email, open phone lines and being in the same place will no longer be necessary	62	60	61
To be able to carry all the important information in your life (personal details, music, photographs, electronic books & magazines, useful information) around on something the size of a keyring and be able to plug it in and access all the information on your hard drive wherever there is a computer	53	54	54
Keyboards will disappear as they will be replaced by speech recognition and fingerprint-operated services	48	45	46
Transmitters will be imbedded in our accessories, clothes or even bodies that interact with the machines around us, e.g. your Travel Card could become embedded in your watch	26	28	27
Electronic books (like Amazon's Kindle) will replace paper books, magazines and newspapers	27	26	25
Our ability to perform basic functions, such as arithmetic, understanding of foreign languages and remembering information (birthdays, addresses, phone numbers etc) will become unnecessary, as machines will take over these functions for us	26	25	25

Most striking is the similarity between the two countries; we are in almost exact agreement about the desirability of each prediction. So while roughly two thirds of people on both sides of the Atlantic are keen to have the flexibility that information on the go would offer, we are all less keen on a futuristic world where books disappear and machines replace our memories.

Beyond technologies for simple encounters?

Dr Carsten Sørensen, Senior Lecturer (Associate Professor)
The London School of Economics and Political Science

The most popular use of the mobile phone in Great Britain and USA is for series of brief encounters. Calls or text messages are exchanged between people as part of their social relationships. However, our mobile phones do not really help us in these social relationships other than merely providing us with standardised contact so we can reach each other instantaneously. This is in many respects a big advantage as it allows us to use the mobile phone as a very flexible technical gadget for creating our own social relations. Much of our use of the internet can be characterised in a similar manner by people contacting each other through emails or accessing information through web pages. Again, just instantaneous connections.

We do, however, need to start thinking about our mobile phone and our internet contact differently as our use of these technologies changes and matures. In order to allow the technology to deliver more comprehensive support, we will need to allow it to mediate not only the technical relationships, for example knowing what cell the mobile phone is connected to, but also actively using this kind of information to guide our interaction with the technology and each other. For example, the highly popular GPS navigation systems are based on not only the GPS unit knowing exactly where it is located in the world, but also showing the driver this on a map. The driver and the GPS system will engage in an ongoing relationships throughout the journey, which hopefully will help the driver to find the most appropriate route. The number of new mobile phones, such as the Nokia N95 or the 3G iPhone, which have built-in GPS receivers and mapping systems, best illustrates the usefulness of this feature. Similarly, the buddy lists available in all Instant Messaging systems directly supports ongoing social relationships as these lists allow users to see the availability of their friends at any point in time. Micro-blogging is an extreme version of this where instant messages are broadcast to channels that friends can subscribe to. Popular micro-bloggers, such as Digg.com's founder Kevin Rose has over 43,000 people following his every movement and thought on Twitter [1].

Generally, relying on mobile phones and internet only as means of creating instant connections is a highly flexible way of maintaining social relations as it entirely is up to the individuals what is done and said. However, all of these encounters are problematic once the frequency increases and participants receive SMS messages each 10 seconds, mobile phone calls each five minutes or have more than a hundred emails in their inbox each day. It is, therefore, at some point necessary to start thinking about how the technology in a meaningful manner can help us manage our social relations. The mobile phone already does this to the extent that it remembers the contact details for our friends, family and colleagues. It also contains the list of past messages so we quickly can reply to ones received. Imagine, however, that you would like to ensure that your elderly parent or young teen daughter had navigated through a complex airport and boarded their flight in time for departure, then this can easily result in a large number of phone calls or SMS messages. Imagine a simple system that would know what part of the airport a person was in and show this on a mobile phone or website. Then no interaction would need to be initiated directly by the person travelling and any of the people wishing to be kept informed. Copenhagen Airport is trialling such a system making it possible to follow passengers via their bluetooth enabled phone or a special badge tracked in the airport [2]. Imagine the SMS obsessive teenagers, who instead soon might replace the constant stream of messages with services continuously updating the locations and moods of their closest friends.

[1]   *Twitter (2008). http://twitter.com/kevinrose*

[2]   *Neely, Brett (2008): Copenhagen Airport Pilots RFID Tags for Passengers. RFID Journal.*
         http://www.rfidjournal.com/article/view/4104/

We do, however, need to start thinking about our mobile phone and our internet contact differently as our use of these technologies changes and matures.

One startling prediction for the future spearheaded by 46% of British adults and 30% of those in the US was the suggestion that 'Shops, libraries and banks will start to disappear as people live their lives online'.

Clearly if this prediction comes to fruition the potential ramifications are countless.

The following statements are predictions that some people have made about the impact and future of technology. Please say how much you agree or disagree with each. "Shops, libraries and banks will start to disappear as people start to do almost everything online"

AGREE (NET)
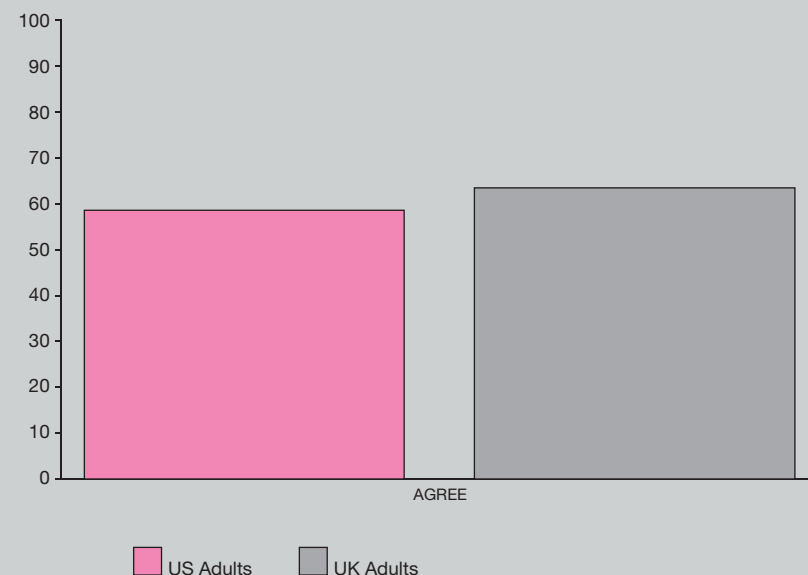
■ US Adults   ■ UK Adults
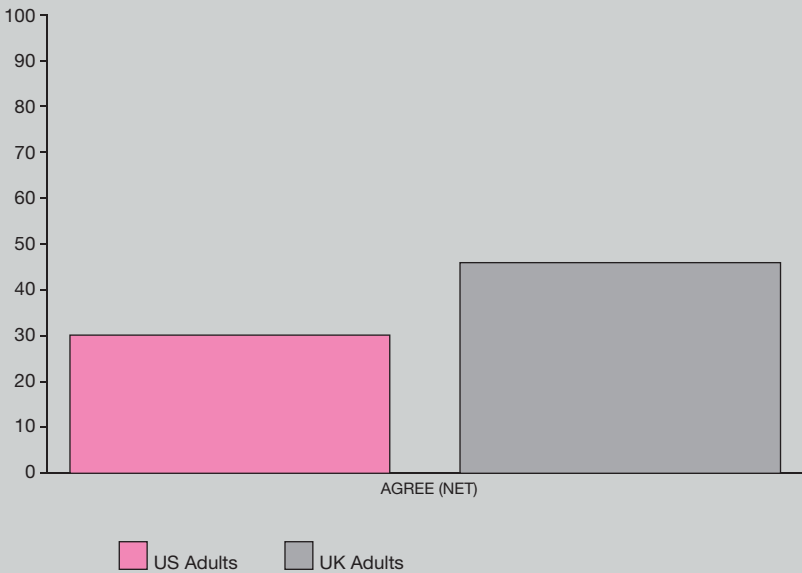
Interestingly our report findings suggest that, should these predictions of large-scale social change occur, they will not be met with much resistance, certainly not in the UK where 64% of adults agreed that 'We have no choice but to embrace the developments in technology. Those who don't will be left behind.

We have uncovered real excitement about what the future holds but also real unease about the inequalities that may occur if we move too fast.

The following statements are predictions that some people have made about the impact and future of technology. Please say how much you agree or disagree with each. "we have no choice but to embrace the developements in technology. Those who don't will be left behind"

However, as we saw earlier when looking at the perceptions of an educational disadvantage for kids without internet access, there is concern about the divisions these changes might create in wider society: 44% of Americans and 51% of Brits agreed that: 'In the future we will live in a two tier society with most people regularly conducting much of their lives online, banking, shopping or working, and those people without internet access, or know how, will be excluded and severely disadvantaged'.

We have uncovered real excitement about what the future holds but also real unease about the inequalities that may occur if we move too far too fast without taking the necessary precautions to ensure that some of the most vulnerable people in society are not excluded from the new internet age.

Most now see the internet as important as their fridge or their cooker.

4. Implications

As every contributor to this report has stressed, our findings depict an era in the midst of great change. Our most important finding is not a geographical divide between the UK and the US but a generational one between Prensky's 'digital natives' and his 'digital immigrants'. (Tania Byron Mobile Life, 2008, Prensky 2001)

This division is profound. Our sense of empowerment, and perhaps more importantly, our sense of belonging, is immensely impacted by our relationship with technology which is currently re-shaping the world we live in.

For the technologically savvy teenagers, who could surf the internet before they had their own bank account, these changes bring with them a passport to a limitless world of possibilities quite literally at their fingertips. For many of the older generation however, these changes often result in a different experience, one of being on the outside looking in, and for some, a fear of being left behind.

I would like to add another to Prensky's two tribes; somewhere in between these groups there is another strata, of those born too early to be true natives in the internet age, but who have lived digitally for a large enough proportion of their lives to feel that they at least have resident status.

For each of these groups the changing times represent different challenges. For the older generation, the immigrants, the challenge is how to adapt, and more crucially how to keep adapting, in order to remain part of a world which evolves just out of reach each time they think they have caught up.

For the natives, and for the permanent residents, the challenge is how to maximise the full potential of the new digital world for the benefit of all of its inhabitants, reluctant or otherwise. Realising its potential is a huge, on-going and ever evolving task, but amongst other things it means shaping the digital world to be safe for use even by its most vulnerable users. Also key is designing it in ways that allow for information sharing, prevents information overload, and explores new ways of applying technology to maximise its potential benefits in every area of life, from education to healthcare and family relationships.

This report bears witness to many changes. In entertainment we have glimpsed the post-TV future; it seems that many youths now reject being passively entertained, and while for some this means actually creating their own content, for others it is simply the case of no longer needing to watch what someone else has scheduled for them on TV. They are ready, willing and able to actively seek out more personally relevant choices from the huge variety of alternative content on the web.

We have learned that many adults still prefer to have their entertainment created professionally and to watch from the comfort of their sofa with no more effort than a flick through the schedule and a press of the remote control. Their relationship with information and connectivity, however, has evolved and their need for both is so great that most now see the internet as important as their fridge or their cooker.

In other areas we have seen how the internet is affecting and changing the nature of relationships, for better or for worse. One in five of the young people we spoke to prefer chatting to friends on-line than socialising with them face-to-face, causing some people to worry about the ability of future generations to build meaningful, quality and long lasting relationships. On the flip side we have seen much evidence

Indeed our reliance on constant connectivity is now so great that many cannot truly relax, even on holiday, without checking in on their personal emails.

that the new digital communications provide the very fabric of the networks which facilitate and enable modern family life and wider support networks. Indeed our reliance on constant connectivity is now so great that many cannot truly relax, even on holiday, without checking in on their personal emails. Once seen by many as an intrusion, such constant connectivity is now necessary for our sense of well-being.

This state of flux, this transition from one age to another, has one unintended consequence that this report has spent some time examining; we increasingly live in households where the most technologically literate, and therefore the most digitally explorative, are those with the least 'real-world' experience. This means that for kids today, many of the formative experiences of their teenage years (flirting, making new relationships, making choices about how to present their personality to others) are being conducted alone, in the privacy of their own bedrooms. In the past this initiation into adult life would have occurred often in the company of peers, and often with pre-emptive 'parental guidance' pep-talks. The increase in privacy provided by the on-line world in the bedroom decreases the opportunity for teenagers to learn by example from their peers and reduces the ability of parents to know precisely which 'talk' they should be having with their children, when.

It is important to remember however, that this fine balancing act, between protecting our children from harm, whilst still allowing them the freedom to mature, is a parental headache as old as time. The playground may have moved, but the issues were ever thus. As Byron points out in her essay, in this new digital arena risk and benefit are highly correlated. It is vital that we use dialogue that ensures children have the chance to participate in the hugely increased opportunities, educational, social and creative, that the internet represents, rather than allow draconian responses to perceived risks limit what the space offers.

Changing our world in these ways means taking risks. We take the risk that losing what we leave behind will be outweighed by the benefits delivered by the new world we embrace.

What is crucial is that we all partake in the shaping of this new world. Our fear of change must not be allowed to stand in the way of participation. In his essay entitled "Ourtube not Mytube" Dr Sorensen outlined how one unintended effect of the internet could be that rather than broadening young peoples' outlooks it could in fact do the reverse. By allowing people to select and discard content according to their own pre-determined notions of what interests them, the internet may actually limit the amount of time young people spend making new interests and broadening their horizons. This type of consequence is one that educators and parents can tackle through the ways in which they encourage internet use and broader social participation. However, it is a potential consequence that will go unnoticed and one that could have negative effects if we fail to engage, if we sit back and assume the natives will figure it all out for themselves.

Changing our world in these ways means taking risks. We take the risk that losing what we leave behind will be outweighed by the benefits delivered by the new world we embrace. Surely this is a risk worth taking when the potential opportunities are so great.
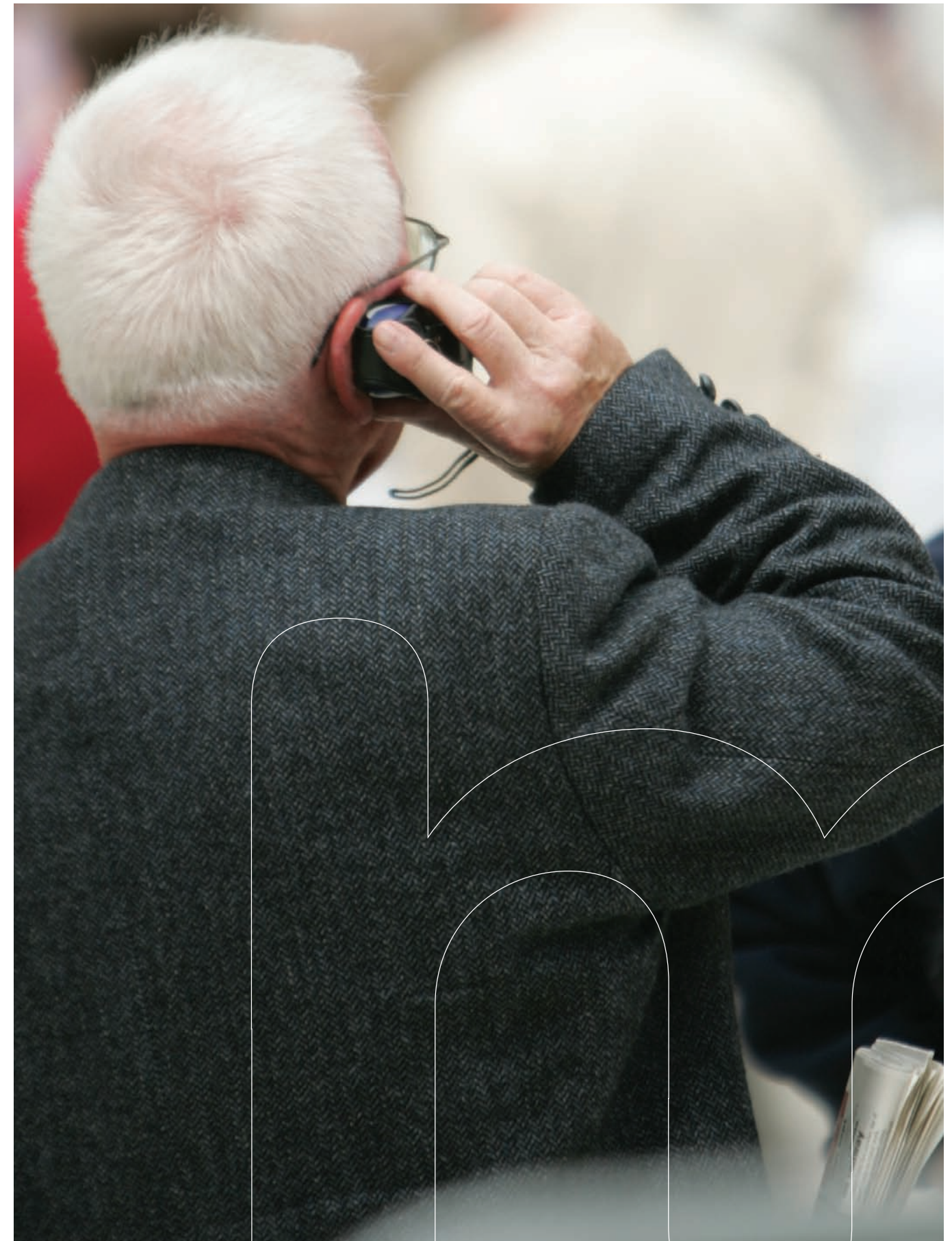
Credits

Mobile Life was the idea of The Carphone Warehouse Group plc and was developed in conjunction with Ipsos MORI.

The project's academic partner is the London School of Economics and Political Science.

The Carphone Warehouse is Europe's leading independent retailer of mobile phones and services with more than 2,400 stores operating across 10 markets.
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